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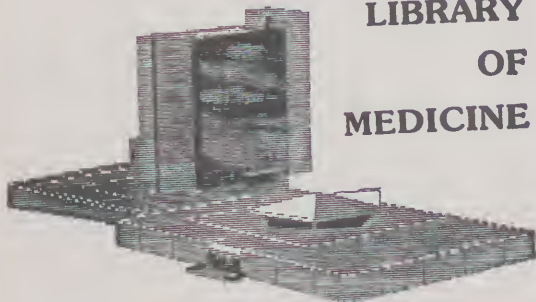
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# CHEMISTRY IN THERAPEUTICS

*A truth that becomes static, is soon obsolete.*

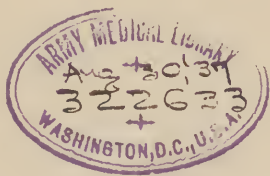
# Chemistry in Therapeutics

BY

WALTER B. GUY, M.D.

St. Augustine, Florida

*Wisdom takes the tangled threads of isolated  
facts and weaves them into the embroidered  
garments of truth.*



W. ROY HUNTSMAN  
PHILADELPHIA, PA.

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## FOREWORD

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This book, a continuation of a previous work entitled "Hydrochloric Acid and Mineral Therapy," has hidden between its lines a story of struggle and research carried on for many years. Without a laboratory or assistants, without sacrifice of animal life, engaged only in medical service among the poor and lowly during days spent in the practice of a general practitioner, the writer has sought for a better and a more reliable therapy.

As each patient told his or her troubles, some with cancer, others hopeless with asthma, diabetes, heart affections, and other ailments, the author ever asked himself: "What can be the underlying cause?"

At last the clue was found; the story is simply told in the text. This clue, followed month after month, and year after year, has led him to a greater mastery and understanding of the biochemical factors underlying progressive and senile degenerative disease.

To go forward, it became necessary to learn the method of measuring degrees of acidity or alkalinity, the pH scale of acid and alkaline values. This method is included in this volume so that others may follow on—as many have already done, by study of the previous work and by application of its teachings and truths to their medical problems.

The clue did not lead to a new synthetic drug therapy, the path of empirical medicine; but instead to the simple elements and compounds found in the chemistry of organic life. It led to the understanding that beneath all life phenomena is one universal law, and when this law is violated, disease in many varied aspects becomes manifest. Because of the recognition of this law, the writer was able to find a simple, non-toxic mineral formula that others have used to great advantage, as the wealth of clinical reports appended testify.

In addition, this work contains the author's conclusions concerning malignant neoplastic disease; also, the biochemical remedy is given, in order that others, who seek a reliable and

specific remedy for their cancerous patients, may test out and perchance improve upon this biochemical treatment.

The author realizes his faults and failures. This book is but the story of his experiences; it does not claim to be final, simply his contribution to this great cause and his conclusions from years of patient service. Many have expressed appreciation of the previous work and he hopes, in spite of inevitable criticism, others may be inspired and helped to travel on this path, which will eventually lead to a brighter and better therapeutic day.

To make this work complete, it was necessary to include subjects treated in the previous one, most of which have been rewritten and brought to date; also a file of the case reports has been retained. All over the world the hydrochloric acid therapy is spreading, winning victories and enthusing its advocates. May this contribution bring help and hope to many otherwise destined to suffer and die—this is our only aim and purpose.

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## INTRODUCTION

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The full significance of the thoughts contained in this book, *Chemistry in Therapeutics*, can be appreciated only by those whose mental horizon is broad enough to permit a vision of future possibilities as well as of established precedents. The physician who steadfastly refuses to allow his imagination to stray beyond the ruts followed by his predecessors, and whose timidity holds him closely within the hallowed precincts of the experience of the leaders of the medical profession, should not read this book; for its imaginative appeal would be lost. We may say, also, that those of hypercritical tendencies may, by reason of their desire to pick flaws in the scientific points touched upon by the author, fail to obtain much of the food for thought presented. Lastly, no one who is completely satisfied with the present status of modern treatment of disease, the curative properties of synthetic drugs, the veracity of agents detailed by pharmaceutical houses, should even consider the propriety of owning a book of this type, which reduces the principles of therapeutics to terms of such simplicity that even a high school student may comprehend their essential features.

The author has been daring enough in this volume to suggest that the health of an individual depends, primarily, upon the health of each cell in his body; and that each cell, in turn, depends for its own health upon the nourishment obtained from the lymph flowing steadily through the infinitesimally small channels within the cellular structure of the human organism. This suggestion is by no means new, for upon this essential principle modern physiotherapy has been based; the author, however, goes farther by claiming that many forms of disease are due to stagnation of this essential and vital fluid. He holds that only by keeping the chemical composition of lymph in a normal condition, and its flow at a normal rate, can health be maintained. He bases his opinion upon the behaviour of various forms of plant life, when the sap is materially affected by the chemical composition of the soil. He even goes so far as to suggest that, due to changes in the chemical composition of this lymphatic fluid, protoplasmic tissue cells may be

stimulated to proliferation in an abnormal manner, producing the conditions which we recognize as cancer.

The author wisely refrains from claiming that he has discovered the long-sought cause of disease; rather, he leaves to inference the conclusion that, perhaps, he has stumbled upon the hidden trail that will lead eventually to momentous discoveries. His personal interpretations of the statements of well-known authorities regarding theories of biological chemistry, are given for what they are worth in simple language. Many of these interpretations may be criticised by erudite scientists, but their criticisms call for equal logic in possible refutation.

The applicability of chemistry in therapeutics, based upon the author's experience in the actual treatment of many forms of disease, by endeavoring to re-establish the normal chemical constituency and the normal rate of flow of the human lymph, is, without doubt, revolutionary; but it is so entirely reasonable, in view of the logical basis of his ideas, that the results seem less phenomenal and spectacular than they might appear. The fact that the actual method of treatment used by Dr. Guy and many others involves only the use of age-old remedies, rather than the exploitation of some hitherto unheard-of synthetic chemical combination, is in itself revolutionary, according to present day standards; but the fact that these remedies are really basic constituents of the human body, and, in appropriate dosage, cannot produce harmful effects, is reassuring, even to the most timid therapist.

The presentation by an obscure practitioner of a theory of profound importance may relegate such a theory to oblivion, in the minds of many. It is well known, however, that many of the greatest scientific discoveries had their origin in the minds of humble, but practical, men and women. Actual hostility to the promulgation of any revolutionary theory is to be expected, even from those whose minds may be broad enough to grasp its significance. This is but natural; for it is only in the white-hot crucible of controversy that the baser elements of prejudice, ignorance, misunderstanding and skepticism can be burned out and the vital elements of accurate scientific knowledge, far-seeing judgment and painstaking research combined with a sound theory in the evolution of a new and durable therapeutic metal.

HENRY PLEASANTS, JR., M.D.



## CHAPTER I

### CHEMISTRY IN THERAPEUTICS

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An ancient seer on the plains of Chaldea twenty-five hundred years ago foretold that in the days to come "man shall run to and fro and knowledge shall be increased." This prophecy has not only come true in the social, political and national life of mankind, but particularly so in the world of medicine and its allied sciences.

After a study of the various reports of research into the realms of nature, concerning phenomena which were unknown and unimagined a generation ago, the student reaches a state of bewilderment, and becomes lost, seemingly, in a maze which leads him onwards without goal or end, into increasing diversity.

Notwithstanding all the varied phenomena discovered by research chemists, biochemists and physiologists, the mountains which hide the truth of a scientific specific therapy from the seeker's gaze are still unscaled, and seem at times impregnable to man's attempts to reach their serried heights.

By the introduction, however, into medical use of hydrochloric acid by intravenous injection, a new opening has been found, a hitherto unknown door which discloses wide vistas of unexplored country which have far-reaching possibilities for the control or cure of senile, progressive and malignant disease; possibilities which thrill to enthusiasm its proponents and draw them ever onward to greater and untold therapeutic powers. This has become increasingly possible by a greater fundamental knowledge of the inherent relationship of biochemistry to protoplasmic life.

This book is written for the purpose of taking up, one by one, the salient points that are linked together by this hydrochloric acid and minerals concerned in biological life; to tell not only the author's own therapeutic victories, but also the experiences of other physicians, so that the medical world may be helped in its warfare against disease and premature death. The author hopes to enthuse and stimulate other phy-

sicians, who are longing for greater therapeutic truth, to carry forward this line of research, to pass through this new door and climb the path to a greater mastery over encroaching disease which, in the form of cancer, heart and circulatory degeneration, is today threatening the lives of an increasing number of an anxious and suffering humanity.

Happily, this open door leads not only into the halls of intricate biological chemistry, which demand highly trained minds and numberless animals for biological research, but also to pure clinical service, where the humblest and most untrained may take part in this struggle for a larger, truer and more reliable therapy.

Biological research by means of animal life, which at times varies greatly from the reactions of human life, can therefore be but a prelude, a testing-out process which pure clinical bedside service alone can prove or disprove.

The family doctor, who sees disease in its incipency, watches its progress day by day until death or recovery ensues, has a far greater opportunity to gain clinical knowledge than a doctor in the large hospitals, who may see hundreds of cases of the same disease, yet may never have an opportunity to see the beginning, to know the family history, the environment, the diet, the psychological influences and other factors associated with the case before disease begins. A case well-studied, watched from the beginning, and ending either by death or recovery, is worth hundreds seen and only partly analyzed.

As hydrochloric acid and the allied mineral and organic acids concerned in organic life are standardized and have their known laws of action and re-action, a student of this method of therapy must be conversant with the common terms of chemical acid and basic reactions. For the benefit of those who graduated into medical service many years ago and are not informed in chemical terminology the following extract taken from LaMotte's booklet *The ABC of pH Control* (published by LaMotte Chemical Products Company, Baltimore, Maryland) is inserted, so that all our readers may fully understand any allusions to the acid base equilibrium of organic life.

*Extract. ABC of pH Control.*

Everyone is familiar with the Fahrenheit thermometer. On this scale,  $32^{\circ}$  represents the freezing point of water. For the sake of illustration, we shall assume that values above and below  $32^{\circ}$  represent degrees of heat and coldness respectively. Thus, any values higher than  $32^{\circ}$ , such as  $34^{\circ}$ ,  $36^{\circ}$  or  $40^{\circ}$ , denote an increase in heat, the degree of heat increasing as the numbers increase. On the other hand, any values below  $32^{\circ}$ , such as  $30^{\circ}$ ,  $28^{\circ}$ , or  $20^{\circ}$ , denote an increase in coldness, the degree of coldness increasing as the numbers decrease.

In a similar manner the degree of acidity or alkalinity of a solution is expressed by the pH scale. Instead of being called degrees, as in the case of the thermometer, the units on this scale are called pH values. It is apparent that it is not necessary for a person to know the derivation of the term "degree Fahrenheit" in order to determine the temperature of a solution by means of a thermometer. It is equally true that the worker need not know the derivation of the term "pH" in order to use this method for measuring acidity and alkalinity. On the pH scale, a value of pH 7.0 represents neutrality. This means that if the material being tested has a pH of 7.0 it is neither acid nor alkaline.

Following the illustration of the thermometer given above, any values higher than pH 7.0, such as 7.2, 7.4, 8.0, 9.0 or 10.0 denote alkalinity, the degree of alkalinity increasing as the numbers increase. Analogously, any values lower than pH 7.0, such as 6.8, 6.6, 4.0 or 2.0, denote acidity, the degree of acidity increasing as the numbers decrease.

A pH value is simply a number denoting the degree of acidity or alkalinity of a solution, and an operator will learn in a few days to use this term just as intelligently as he does the term "degree Fahrenheit." We shall use the term pH throughout the book to denote the degree of acidity or alkalinity.

To give a concrete example, let us say that a solution has a pH of 7.6. The solution is of course slightly alkaline. If another has a pH of 8.2 it is more alkaline than the one of pH 7.6. It is therefore clear that an acid, such as hydrochloric, or an acid salt, such as alum, must be added to a solu-

tion of pH 8.2 to bring it to a pH of 7.6, and that larger quantities must be added to bring it to the neutral point of 7.0, or to an acidity of pH 6.6 or 6.0. Similarly, if a solution has a pH of 6.0, it is acid and it is necessary to add alkali, such as lime, soda, ash, etc., to it in order to bring it to the neutral point of pH 7.0. Larger quantities of alkali must of course be added to bring it to an alkalinity of pH 8.0 or 9.0.

In order that the worker may have some idea of the degree of acidity corresponding to various pH values, it may be stated that a solution which has a pH value of 5.0 is 10 times as acid as one with a pH of 6.0. Analogously, a solution of pH 4.0 is 10 times as acid as one of pH 5.0. Thus pH 4.0 indicates an acidity 100 times as great as pH 6.0. A similar relationship holds on the alkaline side of the scale. That is, a solution which has a pH of 9.0 is 10 times as alkaline as one which has a pH value of 8.0. This relationship is shown by the following table:

TABLE I

pH Value	No. of Times Acidity or Alkalinity Exceeds that of Pure Water (pH 7.0)
0	10,000,000
1	1,000,000
2	100,000
3	10,000
4	1,000
5	100
6	10
7	1 (Pure Water)
8	10
9	100
10	1,000
11	10,000
12	100,000
13	1,000,000
14	10,000,000

This control method has been so widely adopted that the pH values which should be maintained in many processes have been definitely determined.

In making pH measurements, we substitute definite pH values, such as 3.0, 6.0, 7.4, 9.6 and 13.0, for the indefinite

terms "strongly" and "slightly" acid or alkaline. These pH values can be recorded and can be duplicated at any time by the same or different workers.

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The acid basic balance of pH range of life lies, probably, between pH 7.1 and pH 7.8. Higher or lower than these values death ensues; but the range of normal health lies probably between pH 7.3 and pH 7.4.

A variation, however, is found between the cells of the blood and its plasma, indicating that organic life is more than a mere colloidal compound of minerals functioning in a state of an acid mineral balance at a definite heat vibration, but is rather a state of electric vital phenomena.

The protoplasmic cells in spite of all their manifest differences, as between the white cells of the blood, the hepatic, the muscle cells, the sex cells, and so forth, have a basic similarity in common. They are independent units of organic life; they are born, live their life cycle, reproduce their kind, perform their function or duty in life, die, and are then broken down, the waste excreted and their minerals used again in the complex metabolism of the body.

Quoting from *Medical Record*, 3-15-35: "Crile and his associates have definitely proved that all protoplasm is radio-active. Wave lengths of protein cells have been measured in quadrillionths of amperes as well as Angstrom units (an angstrom unit equals one hundred millionths of a centimeter). Radiation is increased or decreased alternately, not only by many definite chemical substances, but also by the hormones of the thyroid, and suprarenal glands, viz., thyroxin and adrenal, both of which actively increase short waves by oxidation."

This electric motive force of biological life must be due to a difference of pH value between cells and plasma (or lymph). It is now possible to determine this variation. Prof. Hawk in his book, *Practical Physiological Chemistry*, definitely states that this difference amounts to pH .30 for blood cells and pH .45 for serum. This difference in pH value must create an electrical discharge between a cell and its media.

A Westinghouse engineer, Mr. Sidney, it is claimed, has



made a sensitive device for detecting this vital electro-magnetic field. It is sensitive to quantities of electricity up to minus 10 amperes to the 7th power. He finds that the human electric aura itself is composed of an electro-magnetic field of ultra high frequencies.

This aura is said to have been found by this sensitive instrument at distances varying from 12 to 15 feet from the person.

## CHAPTER II

### VALUE OF pH CONTROL

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All advances in biological research, seemingly, are dependent on the knowledge and use of the pH scale. This knowledge is most essential in the warfare against cancer and the so-called senile diseases. Until now it was practically impossible to ascertain whether a person was suffering from an acidosis or an alkalosis. This knowledge, were it made available to all, like the clinical thermometer for determining the temperature of the body, would open a field of research in which all might take part, and thereby make the practice of medicine a science, instead of an art, as at present. ✓

The preceding chapter has stressed the value and function of the pH reactions. Let us for a while go back to nature and see what may be learned from her in the inorganic or mineral kingdom.

The water of St. Augustine, obtained from artesian wells is quite alkaline. Its pH value is 7.8 as taken by the author. On bottles, or other containers, in which this water is kept for a few days, a precipitate is deposited and they become quite yellow and repulsive in appearance.

When a small quantity of dilute hydrochloric acid is put into such empty bottles this yellow scum is rapidly dissolved. When this acid solution is tested by the well known potassium thiocyanate test, it becomes immediately of an intense reddish color, indicating that this yellow precipitate is a deposit of ferric salts. The source of the iron deposits is probably from pipes of the water system. Can it be possible that the constant intake of an alkaline water may be an underlying factor in degenerative disease? Ordinary distilled water contains  $\text{CO}_2$  or carbonic acid and is rated at pH 5.7. This city water, in spite of the absorption of  $\text{CO}_2$ , is pH 7.8, and if the pH value of the  $\text{CO}_2$ , as seen in distilled water, is added to it, it will necessarily give a much lower pH value. This question is well worth considering, for an excessive alkaline water, plus a hypochlorhydria, may, seemingly, make a cancer infection ✓

✓ inevitable sooner or later. When this city water is boiled to throw off the absorbed carbon dioxide, the pH reading is pH 8.4, therefore forty times more alkaline than pure water. It would be logical to ascertain the pH value of all water supplies, not alone for the victims of disease but for the welfare of the community.

1. + To take the pH value of an individual is quite simple when understood. The lymph is the middle man, as Professor Hawk terms it, between the blood and the protoplasmic cells. Therefore, it takes on the qualities of both and should be a more reliable medium for ascertaining the pH value of the tissues than the blood or plasma.

✓ Taking advantage of this, the author's practice is to apply a very small piece of cantharides plaster upon upper arm; about eight hours later the subsequent blister is punctured by a hypodermic needle and the fluid is collected upon a small white porcelain dish; one drop of the indicator dye is dropped into it. The resulting color when compared with a color chart gives approximately the pH value of the lymph. Any reading above 7.6 is considered pathological. By this same method serous discharges from cancer lesions, from vesicles as seen in an eczema, or discharge from bronchial tubes or nose may be readily tested to ascertain their pH value.

11 To ascertain the pH values of urine, sweat or saliva is of but little value. The air we breathe contains three parts of carbon dioxide to one thousand; it rapidly combines with water, forming carbonic acid; therefore, the air passages are normally acid. The saliva, a mixture from alkaline and acid forming glands, is usually acid after eating; sometimes alkaline before meals. The pH value of urine changes continuously and may be intensely acid even in an alkalosis of tissues. It may be suggested that the sudoriferous or sweat glands may modify the fluid from the blister or vesicle caused by the cantharides plaster. As, however, the sweat is usually acid in reaction, and this lymph is quite frequently of a high pH value, presumably the sweat glands play no part in its secretion or pH reaction.

To check up on a water supply two samples are required. Put in a dry, clean test tube, free from any acid or alkali, one



cc. of tap or well water, and in the other one cc. from the same water that has been boiled for ten minutes. Not all of the carbon dioxide can be expelled by boiling; at least a value of pH .4 should be added to the pH reading to allow for the acidity present.

To test for alkalinity, add one drop of the indicator dye to each tube. The resultant color should be compared either by a color chart, not the density but the shade of the color reaction. For accurate work, color standards in ampoules are supplied by the various companies who specialize in pH control.

It seems plainly evident to the author that the following factors must be borne in mind if cancer control (not necessarily cancer cure) is to be accomplished.

Such measures as (1) alkaline water supply, (2) food, (3) depressing emotions from fear of want, starvation or disease must be eliminated from human life:

1. By precipitation of excess minerals and then filtration an undue alkalinity of a water supply can be prevented.

2. Alkaline food: Practically all foods are acid in pH values. The only exception is eggs—pH 7.8 to 8.0. Eggs should be eliminated from diet. They are not needed for health or vigor.

Hundreds of reports have been made that hydrochloric acid injections materially alleviate and sometimes cure cancer. But, if our water intake is excessively alkaline, the problem is still with us.

3. The worry of life's struggle, for so many, decreases nature's source of acid, accentuates alkalinity, and the food and water intake may hasten the onset of alkalosis.

A value of pH 7.8 by this blister test will be found in many people who are not cancerous, yet suffer from impaired health. The author believes that long before a cancerous tumor appears, a pre-cancerous condition exists but awaiting a trauma, an infection or other injury, to determine the site of a lymph stasis and a subsequent growth or cancer lesion.

The indicator dye used by the author is known as phenol red.

Before closing this chapter, mention should be made why an injection of dilute hydrochloric acid does not immediately

✓ kill the patient. The acid limit of life is not less than pH 7.10, yet this acid solution probably has a pH value of 2.00 or less. This problem is probably the reason for the widespread alarm when injections of this acid solution were first reported to the medical world. The reason why such injections are harmless is known as the buffer action or control.

By a buffer control, nature keeps the varied acids and bases within the limits of life. "This means that considerable quantities of acid or alkali can be added to the tissues, or that fluids of the body can be diluted, with only a very gradual change in the pH values being brought about."

"Buffer action can be illustrated by means of the following example: Absolutely pure water has a pH value of 7.0. If 1 cc. of 0.01 N. HCl is added to a liter of pure water, the pH will be changed to approximately 5.0, since there is nothing present to act as a buffer or to retard the action of the acid. If the same amount of hydrochloric acid be added to a solution containing both sodium acetate and acetic acid, for example, the change in pH value is negligible, instead of shifting 2.0 pH units as was the case above. In other words, the sodium acetate and acetic acid retard the action of the hydrochloric acid in the latter case and act as "buffers." For all practical purposes, the only thing that has happened is that the hydrochloric acid has combined with the sodium acetate to form acetic acid and the concentration of the latter has been slightly increased. Since acetic acid is a comparatively weak acid, a small change in the concentration does not change the pH to any great degree, because of the fact that acetic acid is very weakly ionized." The above quotation is from *ABC of pH Control* by LaMotte Chemical Products Company of Baltimore, Maryland.

In the *Medical World* for May, 1935, Dr. A. M. Allen has concisely put this problem into a few words: "First, let us remember that all the end-products of vital function are acid, and that in disease there is always an increased acid production, and if there be any change in blood pH it is always toward the acid side. It can be said that a disease condition inclines to be an acid condition, and therefore the use of an acid to ameliorate a disease condition appears incongruous.

"That is, it would seem incongruous if the acid used was of the kind and was present in an amount sufficient to have any effect upon the blood pH. As a matter of fact, HCl in amounts less than that required to hemolyze (destroy) the blood, has but a slight and very transitory effect upon the blood pH, and in the concentrations used by the exponents of HCl therapy it has absolutely no discernible effect, even when measured with a galvanometer sensitive to 1/2000 of a degree on the pH scale."

Nevertheless, when all is said, an alkalosis does exist in many senile, also cancerous, people, as evidenced by the test of the fluid by the pH indicator as already mentioned, also by the statements of many eminent biochemists. This basic alkalosis, the writer believes, is readily understood if we realize that when a hypochlorhydria is present the waste toxic acids are retained to keep the pH value within the limits of life. These acids must, however, be neutralized by the sodium, magnesium or calcium bases. As the carbonates and lactates of sodium and calcium have a higher pH value than sodium chloride, an alkalosis by the presence of these salts is inevitable.

It is not by the small hydrochloric acid content that an alkalosis is relieved, but by the potassium salt in the acid mineral solution. When a hypochlorhydria is relieved by an increase of the normal gastric acid, retention of the waste toxic acids is no longer present. The lactic acid, however, of cancer metabolism, as explained in the chapter on neoplasms, is not broken down and eliminated as carbon dioxide, but must be attacked by a modified acid therapy; also by elimination of the alkaline salts from food and water.

The author has found that blister fluid, whether from vesicles or burns, plaster, or eczema, is more alkaline than the given pH value for the blood plasma. This indicates that the lymph is a far better medium, being the mediator between blood and cells, for ascertaining the pH value of the organic tissues. If a high pH value is found, as, for instance, in diabetes or cancer, this increased value would indicate one of two conditions: In diabetes, that the acidosis was caused by a lack of gastric hydrochloric acid; in presence of cancer, that the

lactic acid produced by the diseased cells was being neutralized by the bases of the blood supply to produce lactates, which are alkaline salts.

The average pH value of blister fluid from healthy individuals is yet to be determined but it probably lies between pH 7.4 and 7.6

The great value of ascertaining the pH value of the lymph by the blister test, is that before a cancerous growth has become evident such cases may be discovered; and if this alkalosis could be removed by the remedial measures and treatment given in another chapter, cancer can be mastered and brought under control; also its recurrence prevented after the destruction or removal by surgical or other methods, of malignant growths. It would therefore give to the medical world a most effective weapon in its warfare against malignant neoplastic disease.

✓ It is very interesting to remember how twenty years ago Dr. James B. Murphy in the Rockefeller Institute, New York City, ground up cancer tissue, filtered it and injected it by a hypodermic syringe into hens' eggs, then placed these eggs in an incubator. When the chicks were hatched almost every one was affected with cancer. But when this same solution was injected into other chicks after emerging from their shells no cancerous growth appeared. The conclusion was that cancer cells grow best in embryonic tissues. By the light of the pH scale we can see why this is so. As before stated, hens' eggs are quite alkaline, pH 7.8 to 8.0. As growth of the chick takes place this pH value is lowered, so that the developed chick is no longer a fit medium for cancer cell growth.

It has been previously stated that as cancerous lactic acid becomes more and more neutralized by sodium or other bases, the pH value is raised. Therefore, cancer cells can grow and propagate in over-alkaline tissues under such pH values.

The writer realizes that criticism of these statements is inevitable. If, however, a definite chemical relationship between the blood plasma and blister fluid can be established, a long step forward toward the understanding and treatment of degenerative diseases can be made possible. It may be contended that the presence of salts in the blister fluid may give

an erroneous reading of the pH values, but the author believes it is the presence of these salts, probably lactates, that causes an alkalosis as seen in cancerous disease. This method of testing the fluid must be read immediately, to avoid error by the acid reaction of the carbon dioxide in the atmosphere, and by daylight.

Clinicians are more concerned with the pH value of the tissue cells than that of the blood, for it is in the protoplasmic cells that the aberrations from the normal appear. The lymph, as stated previously, being the medium between blood and the cells, should be a better criterion and show greater changes in diseased or abnormal conditions than the blood itself.



## CHAPTER III

### ACIDOSIS AND ALKALOSIS

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Before acute or chronic disease in young or senile patients can be successfully and scientifically treated, a knowledge must be acquired of the acid base of pH reactions, not only in the digestive functions, but also in the biochemical changes and reactions that occur in the metabolism of organic life. At present a widespread belief exists that an acidosis is present in disease conditions, and physicians are liberally supplied with preparations and compounds designed to correct this hypothetical acidosis. Also patients with gastric dyspepsia take large amounts of soda bicarbonate or other alkaline salts, etc.; yet senile and degenerative diseases increase everywhere in spite of this alkaline therapy, perchance aggravated by such treatment, as we later hope to show.

It has been pointed out that, as in food, so likewise in the metabolism of life, the majority of the toxins have an acid or low pH value; as for instance, lactic acid, carbonic acid, acetoacetic acids, uric and butyric acid. It is also an axiomatic truth that, if an alkali be combined with an acid a salt is produced. This will again be mentioned when we consider the varied causes of lymph stasis and blockage that doubtless is a prime factor in degenerative disease.

Nature, in her evolution of highly specialized organisms, has used hydrochloric acid not only to assist in the digestion and assimilation of food, but also to keep the necessary equilibrium of the acid base equation in blood and lymph stable, this equation being pH 7.3 to 7.4, as has been proven by many investigations.

This, for those, like the author, who graduated years before these reactions were known and taught, means simply this: That the blood and lymph are three or four times more alkaline than pure water. To appreciate this it should be understood that with the pH scale a N. solution of sodium hydroxide is ten million times more alkaline than neutral water.

There is a vast difference, however, between the properties of various acids. Quoting from *Modern pH and Chlorine Control* by W. A. Taylor Company, Inc., 872 Linden Ave., Baltimore, p. 6: "If N/10 solutions of the three acids, hydrochloric, acetic and boric are titrated under suitable conditions it is found that the total acidity is the same in all cases. It is apparent, however, that these three acids differ radically in properties. Hydrochloric acid is a powerful acid whereas acetic and boric are relatively weak. Bases also show differences, even when the total neutralizing ability is the same. Solutions of sodium bicarbonate, sodium carbonate and sodium hydroxide are entirely different, even when the strengths are such that they will neutralize the same amount of acid per unit volume. These facts have been known for years, but it was not until the ionization theory was developed that they could be explained.

"The theory of ionization holds that certain types of chemical compounds are split apart or dissociated in aqueous solution, yielding electrically charged particles known as ions. These ions are responsible for many of the properties of aqueous solutions. One general property is conduction of electric current. When acids are dissociated, they produce hydrogen ions\* and negative ions. The acidic nature is determined by the extent to which such dissociation occurs, acidity being due to the hydrogen ions. The differences among the three acids named above are due to the concentration or activity of hydrogen ions which they produce. In 0.1 N. solutions these are roughly in the proportions hydrochloric 15,000, acetic 200, boric 1."

It is evident that life is an, or from an, unknown emanation, that in one aspect manifests itself in chemical as well as electrical phenomena. Benjamin Moore stated: "It is in the transfer of energy from one kind to another that the activities which are peculiar to organisms exhibit themselves. A static system is dead; a living thing is peculiarly dynamic."

Although the pH value of the blood and plasma may vary but little in disease, yet we are confronted with conditions which are termed acidosis and alkalosis and we must review

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\*Strictly speaking free H ions probably do not exist in aqueous solution as such but probably combine with water to form  $H_2O$ . Practically this does not affect our assumptions.

these objective symptoms of disordered metabolism and try to discover the underlying factors, if we are to understand the subject of this chapter.

Acidosis is usually understood to be a symptom complex that is found in diabetics and when present must be treated intelligently or death ensues.

"Acidosis manifests itself clinically and chemically, but the chemical studies yield important quantitative information concerning the probable outcome of the disease and the urgency of the need for treatment. The clinical evidence of acidosis consists of air hunger, or exaggerated breathing, a sweet mawkish odor of acetone on the patient's breath and often stupor or unconsciousness known as diabetic coma.

"Chemically, acidosis may be recognized in several ways: (1) The presence of acetone in the patient's urine; (2) the presence of products of incomplete combustion of fats in the urine, especially of diacetic acid, which gives a port wine color on the addition of the ferric chloride solution."—*Merck's Manual*.

Quoting from *Chemistry in Medicine*: "Acidosis brings us to the subject of the acid-base equilibrium of the body, one of the most interesting chemical matters in the whole realm of medicine. For the normal life and function of each cell of the body a constant environment is essential. In consequence, the volume and composition of the blood must be regulated within very narrow limits. The blood must be maintained practically as a constant. This is particularly true in the matter of its reaction, and the acid-base equilibrium of the body is steadfastly maintained, despite the constant introduction of acids and bases in our food. The slightest variation in the reaction of the blood is likely to prove serious. In fact, in order that life be maintained it is necessary to keep the blood less alkaline in reaction than ordinary tap water, and less acid than distilled water, since either of these extremes will probably result in death. The mechanism that maintains the acid-base equilibrium is as ingenious as it is effective.

"The transfer of carbon dioxide from the tissues to the breath is interfered with in acidosis, since the power of the blood to combine with this gas, varies with the acidity or alkalinity of the plasma. The retention of carbon dioxide in the



tissues can be measured indirectly by determining the power of the plasma to combine with carbon dioxide experimentally, and directly by measuring the partial tension of carbon dioxide in the breath. Acidosis is accompanied by a reduction in both. The presence of acidosis can also be recognized chemically by the colorimetric comparison of diluted plasma, after the addition of certain indicators, with solutions of known hydrogen-ion concentration, or physicochemically by the gas chain method. It may also be recognized by the amount of sodium bicarbonate that must be administered to the patient before the urine is rendered alkaline. Acidosis is always secondary to some other disease, and is commonly encountered in diabetes, in certain forms of nephritis characterized by the retention of phosphoric acid, in the dehydration of the body caused by cholera, or other forms of severe diarrhea (especially in infancy), following the excessive ingestion of salts of ammonia, and in many forms of toxemia.

"In contrast to acidosis, is the condition known as alkalosis, wherein the blood becomes overly alkaline. This is a striking finding in some cases of high intestinal obstruction, in which a peculiar and almost characteristic combination of chemical findings is present."

The above is a practical picture of acidosis and alkalosis as usually taught today in medical schools, but throws no light upon the function of the normal gastric acid. As this normal hydrochloric acid is the only normal acid in the organism, its excess, its normal or deficiency, must play a great part in the body metabolism. That there are physiological changes in the delicate pH reaction of the lymph is commonplace, for after food is taken, the acid is concentrated in the stomach and urine becomes alkaline and this phenomenon is known as the alkaline tide.

Also, it is to be noted that in acute alkalosis caused by a blockage near the duodenum, the normal acid fails to enter the circulation. This condition demonstrates that hydrochloric acid enters as an acid into the lymph stream. The results of this entrance must be left for the chapter on diabetes but it is, however, most interesting to note that Doctor Hawk, previously quoted, finds that invariably before breakfast there is residual food in the stomach left over from the previous day,

like unto the residual urine left in bladder. This the author believes to be the means whereby the gastric cells are stimulated to secrete this normal acid continuously, thus keeping a perfect balance of the acid base reaction. Whenever in a normal stomach this acid becomes in excess, a regurgitation of the duodenal contents takes place and inhibits its secretion.

In health, lactic acid, a by-product of muscular energy, must be disposed of. It is derived from the glycogen of the liver, and it is the source of energy for muscle contraction. In cases of diabetic coma this disposal is seriously upset. Lactic acid forms slowly in muscles at rest, but rapidly after exertion; entering first into the lymph, thence into the blood stream, it becomes oxidized, viz., gives off carbon dioxide; and the balance remaining again becomes glycogen. The need of oxygen from excessive exercise causes the increased respiration. If, however, lactic acid is not oxidized—if carbon dioxide is retained by reason of absence of insulin necessary to bring about this chemical reaction, an acidosis results. The cause of insulin failure must be left to another chapter; sufficient here to say that hydrochloric acid plays a most important part in its production, and we shall find before all is said, that diabetic acidosis is but part of a basic underlying alkalosis.

Likewise, the other toxic acids, for their elimination, need the active presence of hydrochloric acid in the lymph stream.

Let us summarize the points brought out. First, when the outlet of the stomach is blocked, and the gastric acid is shut off from the jejunum and lymph stream, we have an acute alkalosis. This sometimes occurs by spasm of the pylorus, and causes acute indigestion, and often death, in elderly people. Second, that when the outlet opens, and the gastric contents are evacuated, the alkaline tide ends and the urine becomes acid. Third, that glucose is derived from glycogen, which if unused by muscular energy and turned into lactic acid, must be got rid of in some way; if not retained in the liver as glycogen, or thrown out of the body by the kidneys, it becomes a poison to the tissues and causes degenerative disease. This again must be left for further elucidation. The preparation of insulin for therapeutic use itself has a strong bearing on this problem; for, if insulin be put in a neutral solution of water it decomposes slowly; if in an alkaline solution it immediately

breaks down; if, however, it is kept in a weak acid solution it remains intact. This indicates that if the lymph supply to the pancreas be too alkaline, insulin may even decompose before it enters the blood stream—perhaps even in its mother cells known as the “Islets of Langerhans,” so named after their discoverer.

This point suggests that the underlying cause of glycosuria and excessive blood sugar may be an underlying occult alkalosis. An increase of blood sugar has been found to be present in malignant cancerous disease; and this disease is known to have an underlying alkalosis. In the writer's hands case after case of glycosuria has been helped by injection or oral administration of a dilute solution of hydrochloric acid and potassium salts. Health, therefore, is a condition where lactic acid is broken down and carbon dioxide given off. Excess of glucose in blood, lactic acid imperfectly oxidized, carbon dioxide retained by lack of insulin, an excess of glucose thrown out by kidneys perhaps by reason of some changes in the kidney itself, is termed diabetes. When we find an increased glucose content in blood and none in urine, when carbon dioxide is not retained, but lactic acid or one of its derivatives, which has been termed cancerogenic acid, with a pronounced alkalosis present, then we should suspect and look for cancerous disease.

In pernicious anemia, hydrochloric acid is absent from the stomach, and the acid base balance is necessarily kept in equilibrium by retention of lactic or carbonic acid. Professor Hawk has shown that with destruction of the red blood cells, the potassium content is also greatly lowered. We shall see how important potassium is in corn life, how iron is taken up into plants, blocking sap channels and nodes in a potassium deficiency of the soil. When this form of anemia is finally conquered we may find that it is this metal that keeps intact the hemoglobin, that when deficiency of potassium occurs the iron content is precipitated and blood cells die.

We find in leukemic blood disease, recognized, among other symptoms, by a hyperplasia of the lymph glands and an abnormal increase in the white corpuscles of the blood, indications also of a potassium deficiency. Quite a few cases of enlargement of lymph glands have been treated, some of years'

standing; one or two quite severe. In these cases the glands would swell at different sites, particularly so in the subcutaneous fat and between tissue muscle sheaths. The acid potassium solution has not failed to relieve any of these cases; whether such cases precede Hodgkins' disease, or are simply cases of precipitated deposits in the lymphatic glands, indicating a potassium deficiency, time and further investigation can only determine. At the same time, such cases, some of years' duration, are invariably relieved by the hydrochloric acid-potassium therapy. The hydrochloric acid being but a 2.5 per cent. solution, the results must come from the potassium content.

The absence of hydrochloric acid in the gastric contents in pernicious anemia, also points to a similar conclusion. The writer believes that unless potassium is present in the gastric acid cells, the acid cells are unable to secrete this necessary acid.

With the afore-mentioned facts in mind we may safely come to the conclusion that the condition, or biological disturbance, termed acidosis is that condition of the tissues in which the normal gastric hydrochloric acid has become too deficient for biological life. It is then that nature calls upon and retains in the tissues the waste lactic and carbonic acids, in order to keep the normal pH values in balance.



## CHAPTER IV

### HYDROCHLORIC ACID

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Hydrochloric acid, once so widely used in medicine, has been relegated to a minor place by the advent of other forms of therapy. Dr. Burr Ferguson of Birmingham, Alabama, who was, apparently, the first to use it intravenously in a dilute solution, one part to 1,500, U. S. P., has again brought this acid to the attention of the medical world. Their most striking therapeutic results and brilliant cures, not only in sepsis and chronic asthma, but also in the degenerative diseases of hearts and bones (others have reported cures in cases of cancerous disease), have on the one hand created widespread enthusiasm and, on the other, condemnation and alarmist cries, quite unmerited and uncalled for. In the columns of a daily paper an article appeared warning of its dangers, claiming that this acid solution injected was a million times more acid than the pH value of the blood.

From the American Medical Council, condemnation of the use of hydrochloric acid solutions given intravenously was also stressed. Even in St. Augustine similar attacks were made by at least one physician warning people of the dangers of its administration.

Not long ago a physician, thinking that toxic hypertension of the arterial system might be due to mental causes, gave a group of patients with high blood pressure, dilute hydrochloric acid after meals. Eighty-four per cent. of this group were greatly helped by its administration; their blood pressure was reduced and symptoms relieved. Considering that hydrochloric acid is quite innocuous, this physician reported his results and claimed that these patients were neurotic. The obverse side of this picture shows Dr. Ferguson and his assistant, with trembling hands and fear in their hearts, injecting a dilute solution into the veins of two negro youths—one with a tuberculous lesion of the face, the other with a syphilitic degeneration of the heart. They gave the acid solution into these two boys' veins most slowly, stopping to say "Do you

feel all right?", then injecting more until the ten cc. syringe was empty. These two boys were kept two hours in the office, but nothing untoward developed and they were sent home. Further injections were, likewise, given at intervals, until at the end of three weeks these two hopeless cases were so much improved that they went to work.

Today all over the world the glad news has spread. In many lands doctors are injecting this dilute hydrochloric acid. Some still use a one part to fifteen hundred, while Dr. Burr Ferguson reports he is now injecting a solution of one part to two hundred and fifty, six times stronger than the original injection, in doses of fifteen cc. What is the concentration that is dangerous to life? About two years ago the writer, by accident, tried to inject a one part to ten of this acid intravenously. The young woman with an acute neisserian infection gave out a shriek, and our mistake was evident. The burning at site of injection soon ceased, however, and our fears were allayed. This young woman made a quick recovery from her disease.

Why all these fears of injury, and why these cries of warning and alarm from those in high places—those who condemn before they investigate and ascertain the truth for themselves? Do these editors of medical journals consider that they themselves alone are the custodians of all knowledge? Are men educated, perhaps by the same Alma Mater, not to be trusted when the results they obtain are given out so generously, so that all may share therein?

Is it because the whole picture of the varied functions of hydrochloric acid in the human body is hidden from our vision? This acid, which is so necessary to life, biological chemistry has ignored to a large degree, focusing its gaze and investigation, rather, upon the waste or intermediate products of metabolic life. More is known of lactic acid, carbonic acid, and uric acid than is known of the only normal acid, the acid of health; generated or secreted by the gastric mucosa. It passes through the pylorus to be partially absorbed by the duodenal and intestinal mucosa, thus regulating the acid base equilibrium, as well as other functions to be written of in succeeding chapters.

Dr. Ferguson contends that its curative powers when in-

jected into the blood streams is due to phagocytosis, the great discovery by Eli Metchnikoff. In other words, presence of the acid stimulates certain white corpuscles of the blood to activity; that these corpuscles being activated engulf and digest the invading microbes present in diseased conditions.

This claim is absolutely true. This is why, not only in the United States, but also in Mexico and far off India, similar reports continually appear in medical journals of victories in cases of puerperal sepsis or child bed fever, cases that but for the hydrochloric acid injections were doomed to inevitable death. Also cures of tuberculosis of bones and lungs, etc., which will be written of in other chapters devoted to these diseased conditions, are likewise reported.

The writer realizes, however, as he writes this, that the possibilities inherent in hydrochloric acid can never be wholly contained in one volume, or in one physician's experience; that, instead of one explanation, that of phagocytosis, we shall find, before all is said and done, this acid has at least seven distinct and varied functions in the metabolism of human life; and he hopes to show that the knowledge and therapeutic control by these seven functions means control to a great degree over infections and senile degenerative diseases that day by day, year by year, are seemingly increasing to such an extent that alarmist cries are heard on all sides.

Let us, for a while at least, take up the varied bits of knowledge concerning hydrochloric acid. It is a combination of two gases, viz., hydrogen and chlorine, united and combined with water so that the U. S. P. acid is approximately 33 per cent. To make the official dilute hydrochloric acid of the pharmacy, roughly speaking, one part of the U. S. P. hydrochloric acid is mixed with two parts of distilled water. Therefore, to make a solution of one part of hydrochloric acid to fifteen hundred, one minim of the official dilute solution is added to ten cc. of distilled water. If five minims are added to ten cc. of water, we get a one part in a three hundred solution.

Austin and other chemists tell us that hydrochloric acid in gastric juice gives off free chlorine. Chlorine, we all realize, is nature's greatest disinfectant and germicide. Dakin's solution, found so valuable for the local treatment of the terrible wounds incurred in the Great War, is dependent for its

chaperon  
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healing powers upon minute amounts of chlorine gas given off in the diseased and injured tissues; likewise chlorine must be the chief underlying source of immunity of the animal organism against septic germ invasion.

A deficiency of the gastric hydrochloric acid, so increasingly common in our present day urban civilization, will be found, the author believes, to be the chief cause of pyorrhea, adenoids, decaying teeth, abscesses, furuncles, appendicitis, as well as a loss of immunity to tuberculosis, diabetes and other senile diseases.

An experienced X-ray clinician reported to the writer that when, by fluoroscopic examination of young children, she discovered an absence of normal contractions of the stomach, indicating atony of the pylorus, invariably a complete absence of hydrochloric acid in the child's stomach was shown by analysis of the gastric contents. Again it was reported to the writer that at a summer camp of the Heckscher Foundation, at Peekskill, New York, many of the children of New York City slums, unused to good milk would vomit, but when dilute hydrochloric acid was added to it, it was readily retained and digested, resulting in rapid gain of weight by these impoverished, anemic children. We shall explain, however, more of the varied functions of this natural, normal indispensable acid, and also that the administration of this acid alone, although often sufficient in young children, will not bring back the normal acidity of the gastric juice in adults nor in cases of senile diseases, so necessary, if complete recovery is to be attained.

We shall also discover in reports of clinical cases that hydrochloric acid has the power, not only to break down and help eliminate uric, lactic, carbonic and other acid waste products of metabolism, but also that it detoxicates and desensitizes the tissues against other disease toxins, pollens and foreign proteins, as seen in hay fever, urticaria and asthma, and restores the circulation of the blocked and swollen lymph channels.

A striking scene is recalled when a year or two ago the author found a young man in a syphilitic coma. A broken, smoky kerosene lamp alone illumined the dark shack. The boy could not talk and was seemingly near death. An intrave-



nous injection of hydrochloric acid, about one to eight hundred in 10 cc. plus a small dose of potassium salts, was given. This was the sole treatment. Three hours later complete consciousness had returned. A similar result was obtained in ten minutes by an intramuscular injection of this same solution into the hip of a boy of ten years with a most pronounced attack of Jacksonian epilepsy. He had been in a one-sided, spasmodic unconscious state for over three hours. A history of skull fracture one year before was given by his father. Ordinary remedies seemed hopeless, but suddenly the thought came, "Give him an injection of hydrochloric acid and potassium salts." The injection was given and the anxious father was told that it would take it ten minutes to reach the brain, where the stoppage of the lymph channels, with resulting increased brain pressure, had caused the constant one-sided convulsions. This man pulled out a big silver watch and, with one hand to prevent the boy from jerking himself off the operating table, he timed the result. The prophecy came true. Within ten minutes the convulsions ceased, and the boy passed into post epileptic sleep. No recurrence has been reported to date. This case, although but an isolated one, at least opens up untold possibilities in brain diseases and disorders accompanied by mania or confusion, from an increased lymph pressure on brain tissue or spinal cord; for this pressure is not due to an increased arterial tension but, rather, due to a toxic reaction, causing blocking of lymphatic spaces and vessels with retention of waste products, and a shutting off from the involved cells their necessary oxygen and food.

In the chapter devoted to diabetes, the writer will review what is known of chlorine combustion and will endeavor to show the relationship of chlorine to oxygen in digestive chemical reactions.

In the chapter devoted to acid base equilibrium of body tissues, this acid will be discussed in that relation. Lactic acid from muscular metabolism is incompletely broken down in the absence or deficiency of hydrochloric acid, causing retention of carbon dioxide, as we shall later see. This deficiency is, doubtless, the reason of the alkalosis found in cancer patients as reported by so many writers. Also we shall see that cancer

and glycosuria are closely related, and often appear in the same person.

Let us for a while get away from names and empiricism, and endeavor to visualize that between the blood and protoplasmic cell is the lymph; that a blocking of this circulation by toxin or injury is not necessarily a blocking of the blood supply, but rather the stoppage of the channels of the lymph, and pressure of lymph from the arterial capillaries, giving rise to congestion and inflammation; if invaded by septic germs this leads to abscess or sepsis; if slow and constant, to degeneration as seen in arthritis, angina pectoris, etc.

A truer therapy will endeavor to detoxicate the tissues, to restore the blocked lymphatic circulation, to check up on the pH of the lymph and bring back to the normal a deficient (if present) production of the normal gastric acid.

In cases of increased gastric acid secretion, known as hyperchlorhydria, we have present a tonic spasm of the pylorus, preventing the duodenal alkaline fluid and bile from entering into the stomach and thus inhibiting the action of hydrochloric acid. Dr. D. W. Broderick of Bournemouth, England, writes (*Medical Record*, 3-20-35) that "A hyperchlorhydria is usually the consequence of vagus over-stimulation. Furthermore, the outpouring of hydrochloric acid into the stomach leaves an excess of alkali within the tissues, the stomach being, chemically speaking, outside the body, and is consequently associated with alkalosis. A hyperchlorhydria, then, brought about by an excess vagus secretion, links a gastric ulcer and dental lesion as the consequence of a common disturbance, rather than of cause and effect." Also, he continues, "But we can go further than this; a hyperchlorhydria may be brought about by a spasm of the pylorus, preventing the natural regurgitation of the alkaline secretion from the duodenum when the gastric acidity reaches a certain point."

These statements from this English physician bear out the statements of the X-ray clinician, viz., that in atony of the pyloric valve there is no output of hydrochloric acid, for the ingress of the duodenal fluid into the stomach has inhibited its secretion. Again it follows that a tonic spasm by reason of inflammation or ulcer in or near the pylorus may close it and

thus allow of an over-secretion of hydrochloric acid. It necessarily follows that the control of this acid is by the vagus nerve acting upon the pyloric valve. ✓

This also links up digestion and the gastric acid secretion with the sympathetic nervous system, that is so profoundly influenced by the emotional states of consciousness.

We can go still further on this line of reasoning, for the endocrine functions and production of hormones, these small but powerful catalysts of biochemical life, are profoundly affected—not only by and through the sympathetic nervous system, but also by the acid base equilibrium or pH of the blood and lymph.

We have already stated that an increased (or alkaline reaction) pH value causes a state of allergy, that is a super-sensitization to foreign proteins—therefore, asthma, hay fever, urticaria, etc.; but it is stated that this increased pH reaction acts through the adrenals as well as other centers of life. Dr. William V. P. Garretson of New York, writing in *Medical Record*, March 20, 1935, on "Allergy, a Neuro-endocrine Interpretation," says: "For the past twenty years the clinical observation is that allergy and anaphylaxis occur only in persons, endocrinically designated as predominantly of the suprarenal type, who are victims of hypoadrenia. It is axiomatic that the person who has the normal amount of adrenalin in the circulating blood never has any of the symptoms of allergy, or anaphylaxis."

Before all is said we shall, doubtless, discover that gastric and duodenal ulcers, tonic or atonic vagus control of the pylorus, are really a form of allergy, by and through the vagus and nervous vegetative system or sympathetic, accompanied or caused by an increased pH lymph reaction, acting through the adrenal endocrine glands. Also that the secretion of hydrochloric acid is an important factor in the endocrine and biochemical balance.

Before this chapter is closed it would be well to emphasize the truism, well known yet sometimes forgotten, concerning the sterilizing qualities of normal gastric secretion. Many micro-organisms are taken into the body by food and drink; if the gastric juice be deficient in hydrochloric acid, they pass through into the intestinal tract and produce disease, such as

food poisoning, typhoid and cholera. Lactic acid in gastric contents is derived from lactic acid bacteria. These bacteria and acid should be destroyed by the sterilizing properties of the normal acid. This state of deficiency may be the explanation of why in a typhoid epidemic or cholera invasion some are taken and the others left untouched by the disease.

Just how the acid gastric cells secrete hydrochloric acid is still unproven or unknown. It doubtless comes from the chlorides of the blood, but many cases are found with ample chlorides, yet with absence of the normal acid secretion. Personally, the writer believes the hydrochloric acid is derived from the potassium chloride in the gastric mucosa; that the chlorine ion is set free during the chlorine combustion and taken up again into the potassium molecule in the gastric acid cells.

This hypothesis can explain the phenomena and also indicate the fact that when potassium is deficient, as in plants, septic and microbic invasion invariably occur.

Achlorhydria or hypochlorhydria is always accompanied by gaseous fermentation and, when this fermentation is present, should lead to an investigation of the gastric acid function.

Victor C. Vaughan, in his classic on *Split Protein Products in Immunity and Disease*, says: "When a foreign protein permeates a body cell, that cell is stimulated to produce a ferment with which to destroy that foreign protein." In other words, disease is parenteral indigestion, and the products of that indigestion affect all the vegetative processes, especially those of the endocrine system. There is no ferment action without a catalyst, and, in the body, the catalyst is always acid. Hydrochloric acid is the only stable mineral acid produced by the body. It is the catalyst for pepsogenic action on gastric contents. Can it possibly be the catalyst for other body ferments? Besides its action on the entire endocrine chain, it stimulates polynuclear phagocytic activity intensely, and also phagocytosis in lymphocytes.

O. H. Brown (3) of Phoenix, Arizona, in a series of fractional analyses, has found that a high percentage of sensitization cases have low gastric acidity. He has used hydrochloric acid with pepsin and calcium with relief or marked im-



provement in a large number of allergic cases, including pruritus, urticaria, eczema, food asthma, bronchitis, flatulence, angioneurotic edema, migraine and trigeminal neuralgia. He also used organic citric acid with effect equal to that of hydrochloric acid.

Beckman (4) of Marquette University, in a paper read at the annual meeting of the Association for the Study of Allergy, in 1930, states: "There is an intimate connection between the state of allergy and the acid base balance of the body; and that allergy is due to a potential alkalosis, i. e., the tendency of an individual to store up too much reserve alkali, or to neutralize too rapidly or too effectively the acid substance which is continuously liberated in the blood stream."

In conclusion, Colby states: "As to the rationale of hydrochloric acid intravenously, we go back to the first principles. The fight against every disease is digestion." —Quoted from article by Courtney W. Shropshire, M. D., of Birmingham, Ala., in August, 1934, *The Urologic and Cutaneous Review*.

## CHAPTER V

### HYDROCHLORIC ACID AND MINERAL SALTS

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Much experience in cases of acute and chronic disease is necessary before the realization of the immense therapeutic value of a solution of hydrochloric acid containing the salts of potassium, silicon, arsenicum, and other remedies (if deemed necessary, as for instance quinine in malaria) can be acquired and understood.

In the writer's experience, not at that time knowing of Dr. Ferguson's work, he gave intravenously a solution of iron and adrenalin in this same acid to a woman far advanced with cancer of abdomen with ascites, with tremendous distention of abdominal walls. The result was most spectacular, for when first seen she was unable to get off her bed. After a few more intravenous injections, this woman went off on a fishing trip, and although she later died from excess of fluid in the pericardium, the results of this treatment were so impressive as well as in other cases, as to induce him to make a profound study of this method of treatment.

At first he thought that the improvement in such cases was due to the iron and adrenalin content. But step by step it was proven otherwise; that these two were not only unnecessary, but in fact were most injurious; that the atoms of hydrogen and chlorine were the therapeutic agents that are truly remedial in cancerous and other degenerative diseases.

In the chapter on alkalosis, mention is made that hydrochloric acid is the only normal acid in the human economy; also that it is probably the factor that enables the chemistry of body to break down lactic acid—not only in the gastric contents, but in the lymph itself. Let us for a while consider this acid, made by the combination of two gases, hydrogen and chlorine, first of all in relation to alkalosis. This condition, so little understood, is much easier to grasp if we take it up in a simpler fashion. If oxygen be absorbed we have alkalinity. < If oxygen be thrown off, we have acidity. For instance, when lactic acid is broken down, carbon dioxide is given off, and



sugar retained. If the  $\text{CO}_2$  is thrown out by the respiratory process we have a normal pH of tissues; if retained, as in diabetic coma, we have an acidosis. When, however, the normal supply of hydrochloric acid is present, the carbon dioxide is not retained. We have, therefore, a misleading paradox and may wisely conclude, as before stated, that a retention of lactic acid or carbonic acid in the lymph and blood is not really a true acidosis, but instead an underlying alkalosis.

In regard to the chlorine ion of this acid, there is no other greater germicide in all the realms of nature; it deodorizes, it destroys microbic life, it desensitizes tissues, it keeps not only the ocean sterile, but also organic tissues; and its depletion must mean nought but a tendency to septic invasion, and loss of immunity not only to disease germs but also to foreign proteins, as seen in allergic manifestations.

Much interest was aroused by a recent report in the daily press of a man dying from overdose of an anesthetic, who was speedily revived by an injection of a weak solution of hydrochloric acid into his veins. Pearl Moorman in Joplin, Missouri, has repeatedly proven this by means of rabbits; but when other rabbits in the same condition were injected with a solution of lactic acid all of these animals speedily died.

That this report is a universal law even in the vegetable kingdom is an easily proven truth. The writer recently took some cut flowers, greatly wilted, washed their stems, and placed them in water containing a few drops of dilute hydrochloric acid to the pint. In a few hours they became reinvigorated and regained their pristine beauty. Changed each day to a fresh supply of acidulated water, this bunch of honeysuckle goes on blooming and is still quite fresh and vigorous.

Doctor de Beszedits of Guerrero, Mexico, has reported this same phenomena, in the *Medical World*, 1934, how hydrochloric acid injected into site of snake bites and scorpion stings rapidly controls and destroys their venomous paralyzing toxins, and also its wonderful effect in the lymph stasis and toxemia of leprosy, elephantiasis and the pernicious malaria, etc., of that tropical country.

In George Hoffer's experiments of disease rot of corn, well worth studying, he tells how he injected growing corn with various solutions of minerals and acids about one per

cent. in strength. Although the solutions of iron and aluminum produced the diseased conditions he was studying, such as the rots and decay of roots, leaves and ears, the solutions of acid, phosphorus, malic and particularly hydrochloric, produced no harmful effects, whatever. All these isolated reports and facts indicate that one basic law governs all manifestations of organic life; therefore, when this acid, with its hydrogen and chlorine ions, is in normal balance with the other mineral constituents of the body, the life cycle is in normal activity. When depleted by worry, anxiety, grief and despair of the spiritual or fifth kingdom of nature, then in such conditions disharmony reigns and the harmonious balance, this equilibrium we term health, is destroyed. Somewhere in the complex vehicle of the life consciousness, in some tissue or organ, the destructive force overcomes the constructive, and decay begins.

Before closing this chapter, mention should be made of the local use of chlorine, as in Dakin's solution, where minute amounts of chlorine gas are given off when applied to septic wounds with pronounced curative results. Similarly, when free chlorine is introduced into the blood or lymph by the intravenous or intramuscular injection of a solution containing hydrochloric acid, free chlorine is given off. No wonder then that such miraculous results as sometimes appear are reported.

The question may be raised here, "Why mineral salts, if hydrochloric acid is capable of doing all that has been claimed?" The writer not long ago asked a venerable professor of Cornell, who had used this acid freely in his long practice, if he had ever seen a case of acidosis caused by its administration. He replied, "No, it seems impossible to produce an acidosis by its use." Why? Because if it be given too freely, nature, or the regulatory mechanism of the gastric secretion, will produce less. Nevertheless, we are concerned not so much with relieving the symptoms of disease, but rather in bringing back the normal production of the gastric fluid. If a potassium deficiency from varied causes exists, causing the deficiency of normal gastric acid, only by its administration can the normal secretion be restored.

## CHAPTER VI

### POTASSIUM

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"Potassium is a silver white metal, atomic weight 39.10. It rapidly tarnishes when exposed to air; decomposes water violently; by displacing hydrogen, so much heat is liberated that the hydrogen catches fire, forming its hydroxide, a strong caustic alkali. It unites readily with the halogens, sulphur and oxygen.

"Potassium is found as a chloride in the body by preference in the morphological elements like blood corpuscles, muscles, cells, etc. It is eliminated in the same form in the urine, but in vastly less quantities than the sodium salt, and the absorption and elimination by the kidneys are not so complete as in the case of the sodium salt, for potassium is found in the feces even in hunger in fairly large amounts; whether it originates from the food or from desquamated cells and secretions of the intestinal mucous membrane, is not known. Potassium salts are absolutely necessary for the sustenance of life. For instance, they are supposed to have a stimulating effect, raising the blood pressure and increasing the number of heart beats. To these salts is also due the stimulating effect of coffee, beef extracts and beef teas in which they are contained." *Austin's Clinical Chemistry.*

In *Chemistry in Medicine* we find this extract by Robt. A. Hatcher, M. D., of Cornell, N. Y. "It is obvious from early times that the blood supply is essential for the normal functions of the heart, but it is only within recent times that we have come to understand the importance of extremely small amounts of certain salts of the blood, and the influence exerted by even slight changes in its composition.

"Small amounts of potassium salts are essential for the heart beat; large amounts are poisonous. It has been found recently that under certain conditions the behavior of the heart toward potassium is an index of its behavior toward therapeutic doses of drugs of the digitalis group, and that those hearts which do not respond to potassium are incapable

of benefiting by the use of digitalis. Such studies lead to a better understanding of the problems of diagnosis and treatment of cardiac disease."

We have previously written that but one life emanation is manifest in all phenomena of life. Let us, for a while, at least, study the research work concerning potassium in the agricultural world. Professor Liebig and many others since his time have shown how necessary potassium salts are, not only to animal life, but also to the vegetable kingdom. All fertilizers for vegetable and fruit nutrition contain as a chief ingredient some form of potassium salts. It is present in waste products of fish and packing houses. It is present in cottonseed meal, but is largely imported from the mines of France and adjoining countries for use as a fertilizer.

Some fifteen years ago it was considered that the black, deep-loamed corn land of our Western States was so rich in plant food that no fertilizers would ever be necessary. As crop after crop, however, year after year, was taken from the soil, production began to fall until at last, in many sections, whole fields of corn rotted in ears and roots. It was also infected with horrible and life-destroying molds and fungi, and dismay and fear reigned in those farmers' hearts.

At first it was considered that the cause of this sad condition was due to infection and contamination by the invading micro-organisms, but investigation proved that, though non-infested seed would give a better crop than infested seed, yet the real cause was within the soil itself. It was, of course, impossible to sterilize the soil—that must contain untold billions of micro-organisms—for productivity and fertility as well as disease. Other troubles came to the sweet corn farmers, for, when this corn was canned, housewives found black specks in it and indignantly returned it, and the canning factory owners were left with large quantities of rejected products on their shelves.

Investigations by chemists proved that these black specks were particles of precipitated iron. Cans were blamed, and consternation reigned. Examination also disclosed that the sickly, diseased corn plants, with rotting roots and ears, covered by many diverse fungi and molds, had a blocking of the nodes of joints of a reddish precipitate that shut off the circu-



lation of the sap from root to leaves and leaves to roots, but what the underlying cause was no one seemed to know.

Superphosphates and also lime were added to soil, but only in fields where an excess of aluminum with a deficiency of phosphorus was present was success attained, and strong, healthy, robust corn grown with full ripe ears.

Finally, after some years of search, the cause came to light. Far from the prairie lands, at Terra Ceia, North Carolina, similar trouble had appeared. The peat soil at this location, after one or two good crops, failed to produce healthy corn plants; they rotted in the fields or failed to grow. Here when potassium sulphate was applied to the soil, with or without lime or phosphates, the corn once again grew tall, strong and healthy; no longer did molds and fungi appear and infect roots and ears, nor did deposits of precipitated salts block the sap channels at nodes and leaves.

George Hoffer, far away, examined samples of these plants grown with and without potassium salts. He then used the old reliable iron test on the blocked sap nodes, a drop or two of dilute hydrochloric acid followed by a drop or two of a solution of potassium ferrocyanide, caused these nodes to turn a flaming red. It was iron that had poisoned and blocked these sap channels.

Likewise, when the cut stalk ends were placed in a solution of methylene blue, it disclosed the fact that these same channels were almost completely blocked up by the iron deposits. Let us leave the vegetable world for a while, for we have already seen that, as in vegetable life, animal organisms have a similar circulation, viz., the lymph circulation, which has its channels and spaces, nodes and lymph glands. We know, too, by clinical cases that these glands block and swell. Also we know by reason of blisters and oedema that lymph is colorless like the sap of trees and is not only the nutrient of protoplasmic life, but also gives it oxygen, and carries away to the blood its waste carbon dioxide and metabolic toxins.

Can these lymph channels become blocked as in the described deficiency disease of corn? Can iron become deposited in lymph spaces in the various organs of the body? Do organs degenerate and fail to perform their functions by reason of toxemia and lack of nutrition? Can human and animal

bodies suffer from potassium deficiency? Can the human body be invaded by parasitic and destructive micro-organisms in a mineral deficiency disease? Does immunity against invading and infectious micro-organisms depend upon a basic equilibrium of minerals? When this balance is upset, do antibodies, etc., fail to function, phagocytosis stop, the endocrine glands no longer produce a harmonious secretion of hormones, and the pH or acid base value in plasma and lymph become so increased that the vital currents fail, and death comes when the unbalance of mineral is carried too far? The answer can only be: "Yes."

In *Practical Physiological Chemistry*, by Hawk & Bergeim, we find the following quotation concerning potassium:

"The potassium concentration of normal human blood serum is relatively constant, ranging from 16 to 22 mg. per 100 cc. Pathologically increased values have been reported in uremia and possibly eclampsia, though data are too limited to allow any definite conclusions. The corpuscles contain a high concentration of potassium, so that in primary or secondary anemia the values for whole blood, which is normally between 150 and 250 per 100 cc. may be low."

Let us study and analyze the above quotation. It tells us that the blood corpuscles contain from 9 to 11 times more potassium than the serum (or lymph); also that in the anemia this content of potassium in the blood corpuscles is greatly lessened. When we call to mind that potassium stands at the head of the list of electro-motive metals, being more potent in electric motive power than sodium, we begin to realize dimly something of life—let us call it electro vital energy—that exists between protoplasmic cell and lymph; that a different electric potential or electric motive force between cell and lymph is part, if not the whole, of life itself.

Again we ask, have any deposits of iron been discovered in anemic conditions of human blood? Has iron, as in corn, blocked up any of the lymph channels of the human organs? The answer is "Yes." Dr. Edward J. Steiglitz, of the University of Chicago, and other biological chemists have, like George Hoffer in corn diseases, discovered in kidney and liver tissues in autopsies of cases of pernicious anemia these same



iron deposits. By a delicate chemical process these iron particles, as Prussian blue, can be seen microscopically.

What therapeutic lesson can be derived from these facts? Iron can be a poison in senile years. The hemoglobin balance in the red corpuscles is dependent on a sufficient quantity of potassium in the cells; when potassium is deficient, hemoglobin breaks down; its iron content is released and oxidized. Iron may be precipitated in the lymph spaces of liver, kidneys, and possibly other organs, as seen in a potassium deficiency of corn, blocking the microscopic lymph channels, thus causing a lowered nutrition, retention of toxins and a lessened supply of available oxygen to the affected cells.

Today, iron is seldom used in therapeutics. The famous Blaud's mass of two generations ago, now greatly discarded, was truly efficacious, but its virtue, in the light of the above statement, was largely due to its potassium carbonate content. The tincture of iron that used to blacken our ancestors' teeth contained hydrochloric acid and esters. Potassium sulphate was discarded from Dover's Powder, and it no longer performs what our old-fashioned doctors expected of it. Senile and degenerative diseases daily, yearly increase. We believe they are caused by a deficiency of potassium and a consequent blocking of lymph spaces in heart muscles, kidney tissues, brain and arteries. Meanwhile the writer hopes this statement will sink into the subconscious minds of his readers so that they, too, will look for mineral unbalance, seek and find for themselves the answer for the crying needs of a suffering, at times despairing, humanity.

In making comparison of animal and vegetable organisms, one great difference should be borne in mind, and that is, that plants have their nutrient organs, as roots, leaves, etc., outside their bodies, while animal organisms have their food absorbents inside; yet our intestinal digestive organs, because of their similarity in function, have ever been termed the vegetative system.

The lungs correspond to the leaves of plants, giving off carbon dioxide even as plants do when darkness comes upon the earth; the power to transpose starches into sugar or glucose is seemingly dependent upon the liver and possibly the skin, which receives the vital life-giving rays of the sun.

Do adults need iron? It is possible that we may get more than we need. In St. Augustine, Florida, the water supply comes from artesian wells, is carried through iron pipes to people's homes. On the water bottles and other containers, after a few days appears a yellow scum. If these bottles are washed with dilute hydrochloric acid, this scum disappears. If we add to this acidulated water the simple test for iron previously mentioned, viz., potassium, ferrocyanide, a deep orange-red color appears.

Dr. D. de Beszedits has reported in the columns of the *Medical World* how with a few injections of a dilute hydrochloric acid, accompanied with the oral administration of a hydrochloric acid solution containing potassium salts, little undernourished children in the interior of Mexico put on weight, renewed strength and vitality. A widow in the city with five small children has to support herself and her children on the government dole of two dollars and a half weekly, the youngest child born as its father, a war veteran, was near death by reason of pulmonary tuberculosis and a gastric-duodenal carcinoma. These children were undernourished, the youngest child, less than two years old, most affected. All were given our hydrochloric acid mineral solution. It was remarkable to note how this solution of potassium salts restored them to health. The acid solution was but two and a half per cent. U. S. P. when solution was made up, too weak to aid except in the absorption of the potassium content.

*ed only*

In the country districts are found farmers who raise hogs, feeding them on the swill food from restaurants and hotels; knowing that the meat from these pigs will be too soft for acceptance by packers and will be rejected by indignant cooks, who have no use for watery fat, these pig raisers buy hog lye. This lye is potassium hydrate, which, added to the pigs' food in small amounts, brings these pigs up to the status of "corn-fed hogs," and thus eliminates the excess of sodium ions and chlorides.

Potassium can displace sodium ions. The ratio of dosage between, for instance, sodium iodide and potassium iodide is about one to nine, that is, if a safe dose of sodium iodide given intravenously is 20 cc. of a 10% solution, only a one or, at most, two per cent. solution of potassium iodide should be

*but the effect on kidney health is*  
*8.01*

administered. Death of a patient injected, by mistake, with a potassium iodide solution has been reported.

Advantage may be taken of this folk lore of the farmers. There are many women of middle age, or older, who have folds and bags of unsightly fat hanging to their muscles. Such people can take a potassium salt to advantage, but which one? The hydrate tends to alkalosis and this, in the light of a probable alkalosis preceding cancer, is unwise. Let us draw, then, another analogy from the kingdom of agriculture and try to apply it to the kingdom of man.

In western Florida tobacco is grown; fertilizers are absolutely necessary to its sandy soil, especially potassium. If a muriate (chloride) be used, the tobacco plants will grow fair and strong; but, when processed for smoking, will oftentimes refuse to burn, perhaps due to an increased water content. When, however, tobacco plants are grown by the aid of potassium sulphate, no such trouble is found.

Chloride excess is seen in watery, dropsical people. In edema and dropsy chlorides are retained; therefore, in nephritic, fatty, flabby patients a daily intake of potassium sulphate in minute amounts may be confidently expected to act beneficially to dehydrate watery tissues, expel excess chlorides and strengthen cardiac and other muscles of body.

It should be always borne in mind that potassium in minute quantities, well ionized by free dilution, feeds muscle cells, making new strength, new life and vigor, as will be later shown in cases of angina pectoris and other cardiac affections; it also supplies this necessary and important metal to the red corpuscles of the blood. Indications surely point that potassium may be the missing link in treatment of pernicious anemia as well as other forms of impoverished blood.

Large amounts of potassium paralyze the heart and may cause death. Also an excess of this element may cause rapid dissolution of neoplastic cancer tissue; and even our weak mineral solution must not be used too freely in advanced cancerous disease but must be modified, especially if destruction of vital parts is not desirable.

When one looks over its use in the agricultural world and discovers how its application to a starving soil may increase, for instance, a crop of potatoes from 30 to 300 bushels per acre,

it can readily be realized how a few grains given to the under-nourished children already mentioned can be so important and helpful.

Likewise the weakened cardiac muscles can be fed and restored to normal function, as we shall later see.

Potassium deficiency in human tissues is also indicated by coldness of extremities even in hot weather, also by a tendency to callous formations on soles of feet and toes. At times an excessive callosity becomes quite distressing. In such cases the acid potassium solution gives great relief, also alleviates the sensation of cold and fatigue.

Recently the administration of potassium chloride with most helpful results, in cases of "myasthenia gravis" have been reported in the "Lancet," in Great Britain. Improvement in the affected muscles of the face in these patients was noteworthy in less than one hour following its administration.

## CHAPTER VII

### ALUMINUM

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It was mentioned in the preceding chapter that aluminum salts, like ferrous salts, were very injurious to plant life. When we call to mind the enormous amount of aluminum in use to-day as cooking utensils and also read carefully the account by George Hoffer in Purdue University bulletin, issued by the United States Department of Agriculture, concerning the injurious effects of this metal when in excess in plant life and the possibility of aluminum salt infiltration into the lymph spaces, we can realize the influence of such infiltration on senile disease. The writer now wishes to point out certain salient facts, state the possibilities inherent in them and leave the reader the privilege of drawing from these available truths his or her own conclusions.

The investigation by George Hoffer of corn diseases was carried on at the same time as the discovery of the relation of potassium to the absorption of iron in corn plants. At this time in various sections of the Middle States, whole fields of corn were stunted or refused to grow; in other places the plants changed color, or fired, as the farmers called it, fell, and rotted in the fields. It took several years to work out the cause of and find the remedy for these corn diseases that, unless corrected, meant starvation to many poor farmers. It was early discovered that these plants that were covered with various rotting molds had their nodal plates, or joints, blocked with aluminum salts. In a potassium deficiency it was salts of iron. What could be the cause of aluminum blockage? When the problem was finally solved, the secret discovered, it was found that it was a deficiency of phosphorus that caused this disease phenomena.

When superphosphate was added to the soil, aluminum absorption ceased, the corn grew tall and strong and horrible molds no longer were found on roots and ears. Has this story of mineral deficiency any bearing on the ills of human life? A case of dermatitis has just left this office; her left



leg and neck covered with furuncles and open sores. She came here desperate because of a failure of relief measures given at a hospital. She did not react to vaccine, but when the inquiry was made she told of aluminum cooking ware used freely in her present home. The acid potassium solution, later to be described, was given her to take four times daily, also mineral oil with iodine and naphthaline was applied locally. Improvement was rapid. Likewise a middle-aged lady of Washington, D. C., was seen last summer in Maine. She gave a history of indigestion and neuralgic pains, insomnia, and constant fatigue. Her kitchen, when examined, was full of aluminum vessels. The same internal treatment was prescribed, whole wheat bread and bran advised in diet, and the kitchen ware abolished. Renewed health soon came to this woman. The white flour foods are deprived of the phosphorous salts and, doubtless, in many places people suffer from slow aluminum poisoning.

It is well to call to mind the acid base reaction or pH of foods. The writer was surprised to find on investigation that with the exception of eggs, practically all food is of an acid reaction ranging from pH 2.9 in apples to pH 6.3 in fish and meat. As aluminum metal gives off salts in an acid medium, it is readily understood that kettles and pans may become injurious if used constantly.

A test for aluminum, which may be made before treatment is begun, is easily carried out at any doctor's office. Take clear urine, about 3 cc., add 3 cc. of dilute hydrochloric acid; after a few minutes add a solution of ammonia forte to more than neutralize the acid; a flocculent white precipitate shows the presence of aluminum salts.

Do aluminum salts in body cause a lymph stasis? A trace of aluminum appears to be necessary, like copper, for normal health. When in excess, however, it must cause disturbance; usually these patients complain of burning neuralgic pains in the region of the scapulae; also gastric and duodenal distress. That aluminum from baking powders is harmful is very doubtful, as the manufacturers always add an acid phosphoric salt to the powder. Traces of aluminum are found in nearly all vegetables and cereals.

In another chapter Dr. Handley shows how cancer may

arise from the blocking of a lymph vessel. That aluminum is a cause of cancer, no evidence, at present, is at hand; yet everywhere cancers are found of many varieties, rather indicating a variety of causes.

The writer, therefore, unhesitatingly, condemns the use of aluminum cooking utensils.

The story as told by George Hoffer is most interesting. He tells how in hot, steamy corn fields, he bored holes in healthy strong plants, inserted glass stems with bulbs, into which he poured his various test solutions. Those plants that received weak solutions of iron or aluminum promptly withered and died; also the disease rots appeared. On the other hand, plants receiving weak solutions of acetic, malic and other acids, with exception of formic acid, were unaffected. No injury came from solutions of hydrochloric acid.

The acid mineral therapy is always prescribed by the author in diagnosed cases of metallic poisoning. It opens up blocked lymph channels, sets up a healthy phagocytosis, raises the immunizing power of lymph and blood, and can be applied diluted, if desired, directly to the lesions. This method of local use will be mentioned under treatment of cancerous diseases.

Before closing this chapter mention should be made of present-day foods. In early pioneer days the soft, white, demineralized wheat flour was unknown. Today the life germ is eliminated from the flour, the pericarp with its silica and phosphates removed; it is then bleached and put out for human consumption. It would not be possible to transport and keep indefinitely those early meals, for, soon after grinding, the oily content of the life germ becomes rancid and the flour becomes unfit for human consumption.

Not long ago a bright chemist in the government agricultural bureau found that tendency to rancidity could be appreciably delayed if the whole flour or meal were put up in bright green, air-tight containers, and that it could be kept in good condition long enough for interstate commerce. We hope that this discovery will soon be made use of and that, once again, the full nutritive value of grain will be made available for all mankind.

## A LIST OF FOODS WITH THEIR pH VALUE FOLLOWS:

Apples	2.9 - 3.3	Sauerkraut	3.4 - 3.6
Apricots (dried)	3.6 - 4.0	Shrimp	6.8 - 7.0
Asparagus	5.4 - 5.7	Jellies, fruit	3.0 - 3.5
Bananas	4.5 - 4.7	Lemons	2.2 - 2.4
Beans	5.0 - 6.0	Limes	1.8 - 2.0
Beer	4.0 - 5.0	Maple Syrup	6.5 - 7.0
Beets	4.9 - 5.6	Milk, cows	6.3 - 6.6
Blackberries	3.2 - 3.6	Molasses	5.0 - 5.4
Bread, white	5.0 - 6.0	Olives	3.6 - 3.8
Butter	6.1 - 6.4	Oranges	3.0 - 4.0
Ginger Ale	2.0 - 4.0	Oysters	6.1 - 6.6
Gooseberries	2.8 - 3.0	Peas	5.8 - 6.4
Grapefruit	3.0 - 3.3	Peaches	3.4 - 3.6
Grapes	3.5 - 4.5	Pears	3.6 - 4.0
Human Milk	6.6 - 7.6	Pickles, dill	3.2 - 3.6
Jams, fruit	3.5 - 4.0	Pickles, sour	3.0 - 3.4
Cabbage	5.2 - 5.4	Pimento	4.7 - 5.2
Carrots	4.9 - 5.2	Plums	2.8 - 3.0
Cheese	4.8 - 6.4	Pumpkin	4.8 - 5.2
Cherries	3.2 - 4.0	Spinach	5.1 - 5.7
Cider	2.9 - 3.3	Soft drinks	2.0 - 4.0
Corn	6.0 - 6.5	Squash	5.0 - 5.3
Crackers	6.5 - 8.5	Strawberries	3.0 - 3.5
Dates	6.2 - 6.4	Sweet Potatoes	5.3 - 5.6
Eggs, fresh white	7.6 - 8.0	Tomatoes	4.0 - 4.4
Flour, wheat	6.0 - 6.5	Tuna	5.9 - 6.1
Potatoes	5.6 - 6.0	Turnips	5.2 - 5.5
Raspberries	3.2 - 3.6	Vinegar	2.4 - 3.4
Rhubarb	3.1 - 3.2	Water, drinking	6.5 - 8.0
Salmon	6.1 - 6.3	Wines	2.8 - 3.8

## pH VALUES OF BIOLOGIC MATERIALS

Blood plasma	7.3 - 7.5	Feces, human	4.6 - 8.4
Spinal fluid, human	7.3 - 7.5	Urine, human	4.8 - 8.4
Saliva, human	6.5 - 7.5	Milk, human	6.6 - 7.6
Gastric Contents, human	1.0 - 3.0	Bile, human	6.8 - 7.0
Duodenal Contents, human	4.8 - 8.2		

## CHAPTER VIII

### CALCIUM

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Calcium, a white metal, atomic weight 40, is one of the most important minerals in organic life; its high atomic weight, second to the highest in the human body, ferrum, shows it to be of but slight solubility. It belongs to that group whose hydroxides have strong alkaline reactions, and therefore plays a most important part in the complex acid mineral balance or pH of all organic life.

Calcium is found in the human body in various forms, as the fluoride, chloride, phosphate, oxalate, sulphate, etc. The fluoride is found in the bones, and small traces in the blood, brain and milk. As phosphate, it is found in all the fluids and solids of the body, and is produced by combustion of all the albumins except connective tissue. As a carbonate, it is found in the saliva, often forming the so-called salivary calculi; in urine, and in conjunction with phosphoric acid in the teeth and bones. As a chloride, it is found in the gastric juice as a secondary product. As a sulphate, it is found in urine; also the urate and oxalate. It enters the body in food, both in organic and inorganic forms, and the latter may come from drinking water, in which it is held in suspension. This organic form is absorbed, if converted into chloride, by the action of the gastric juice; about 5 to 10 per cent. is eliminated through the kidneys; the remainder by the feces. The acid phosphate of calcium is much more readily eliminated by the kidneys than the alkaline. Hydrochloric and citric acids favor the excretion; sulphuric acid and alkalis retard it.

#### *Absorption of Calcium*

It is evident that, when calcium is taken into the body, its absorption depends not only upon the nature of its chemical compound or salt, but also upon whether the supply of hydrochloric acid in the gastric juice is normal, deficient or absent. Calcium chloride is easily absorbed, but the sulphate is not. Though the artesian water supply of this part of

Florida is strongly impregnated with calcium salts, the writer has seen cases with calcium deficiency, the symptoms of this deficiency to be described further on. Calcium carbonate, chalk or limestone is readily absorbed, being a feeble salt easily affected by the acid of the gastric juice. When it is present in water, people in these localities require a plentiful amount of fruit acids in their diet, to cause its elimination and prevent formation of calcium calculi in kidney and bladder.

While travelling in the Near East in 1929 the writer visited the medical department of the American University of Beirut, Syria. In Palestine and Syria, very mountainous, the soil and rocks are composed of chalk and limestone. No rain had fallen for eight months, and the air and water were full of calcium carbonate. What interested the writer most in this little hospital that is training the young men and women of the East for medical service, so much needed in backward countries, was the enormous collection in its museum of stones that had been removed from kidneys and bladders. They were all shapes and sizes, some of comparatively great size; yet these people were otherwise healthy, indicating that calcium carbonate, now so much used for gastric acidity, has but little action on the acid base balance of animal bodies.

Deficiency of calcium, as well as potassium and other minerals, is seemingly, then, caused chiefly by deficiency of hydrochloric acid in the gastric juice, when this acid is replaced by lactic acid; this change accompanies and oftentimes precedes degenerative changes and is what the writer calls basic alkalosis, for the toxic acids of the body, as seen in excess in all diseases, need for their excretion a normal supply of the gastric hydrochloric acid. This is a fundamental reason for the widespread reports and truly miraculous results from the intravenous or intramuscular injection of this diluted acid.

When, however, the basic alkalosis is present and the administration of a soluble calcium salt is prescribed grave results must necessarily follow, as seen in cancer, ulcers, and other diseases.

The agricultural world has its troubles from the same reason. There are groves of citrus fruits in Florida injured for years by the unwise application of slaked lime applied to the soil. Some plants, such as fruits, require an acid soil for



their growth. Likewise lime water, a very weak solution of calcium hydrate quite alkaline in reaction, may be helpful to children, also calcium in glucose, as a gluconate or lactate or iodide; yet may be useless or most injurious in adult or senile diseases. In the few cases of calcium deficiency met with here, this metal can be readily absorbed by giving it as a chloride in a dilute solution of hydrochloric acid.

A form of asthma, for instance, aggravated or caused by exposure to dampness or water, is readily relieved by its administration; delayed union of bones—one case of a man who for seven months lay in a hospital, fed with calcium lactate, cod liver oil extracts, milk in large quantities, sent home with a cartilaginous union of a tibia and fibula fracture, speedily recovered with the acid calcium chloride treatment.

Tetanic muscular spasms are best relieved by the acid calcium phosphate; also nerve weakness and debility. It must be ever borne in mind that a calcium deficiency may be due to its lack of availability; that is, calcium may be even in excess in body tissue but in an inert form by reason of the lack of sufficient normal gastric acid, and may be deposited with urea and sodium in the joints, causing the common inflammatory arthritis seen on every hand.

Calcium administration increasing, as it does, a basic alkalosis is, therefore, strongly contra-indicated in all senile disease, even in gastric or skin ulcers; also in all forms of cancerous affections. It will but aggravate the sores and cause irreparable damage in many cases.

Let us go back for a while to the 1880's, when the Liebig theories of digestion were the standard of diet, before the discovery of the "hidden hunger" or vitamins so much at present in the public eye. It was at Geneva, New York, where Stephen Moulton Babcock, since famous for his unselfish free gift to the dairy industry—known as the Babcock butter fat test—first made his classical tests on cows. This test was to find out how much protein, fats, starches, sugars and minerals were necessary for proper feeding. Their food was weighed, analyzed and its component chemical parts properly computed; likewise the excreta. To his amazement, the excreta contained exactly the same amount of nitrogen, fats and carbohydrates that these cows had eaten, the minerals

of the food alone being increased in the excreta. It shattered for all time the Liebig theories of food values; but many weary years were to go by, years of patient, dogged search, before the knowledge of vitamins were to come to fruition and that the nature of the food is of still greater importance than its chemical content.

It is by the dynamic life energy stored up in plant and animal tissues by the sun and vital forces, the starches, fats and proteins that are broken down and absorbed by the organism, that life goes on, growth and repair are made and reproduction is sustained, from highly organized food products to simpler chemical combinations; these, again, if men were but wiser, to be restored to the soil, instead of being wasted in river and sea, to keep intact the fertility of our mother earth.

Not only by the digestive fluids does this process of reducing these highly organized foods go on, but also by the aid of myriads of many kinds of microbic lives, as in a fertile soil there are teeming billions of varied organisms, microscopic and ultramicroscopic in size, all playing their parts for good or evil, for construction or destruction, dependent upon a properly balanced supply of minerals and organic food and a correct balance, too, of the acids and mineral bases. Likewise, in the digestive organs of man there must be an obedience, if health is attained, to the same dynamic laws of organic and mineral food and a correct balance or pH of the acid and mineral equation. So, too, as in the soil of the earth, the digestive system contains swarms of billions of varied microbic life—mostly constructive, but some destructive—to break down to simpler form the food of each individual. It is to this point that the reader has been led in order to emphasize the problem of the pH or acid alkali balance in this chapter, and to consider just what changes occur when this balance is interfered with or lost; just what modification takes place in the orderly, balanced, micro-organic life by variation in the pH balance.

In a personal letter to the writer Professor Otto Rahn states most conclusively that "the acidity of the medium influences the growth rate of bacteria to a considerable extent. Each organism has an optional pH where it grows best, and growth becomes slower whenever that pH is changed in one

or the other direction. The optional pH varies greatly with the species."

It is the understanding of the pH balance that is so necessary before treatment of chronic and oftentimes acute infections can be successful. It is by this knowledge that cancer and the other complex senile diseases can be prevented, mitigated or cured. As calcium in its soluble forms produces alkalinity, when this pH balance is higher than normal its use is most strongly contra-indicated; this pH reaction is raised in all senile diseases and conditions. This same condition must also be the reason of a lowered immunity; why appendicitis and other pus infections are so increasingly common, why senile insanities and other conditions, such as arteriosclerosis, degenerated hearts and other organs, are most common in the advancing years of life.

Depressing emotions causing diminution of hydrochloric acid in gastric secretion, so prevalent in the whole world today, is mainly responsible. Fully half of this most advanced civilization is anxious, fearful, in want or destitute. The very few have nearly all of the bonded wealth, the remainder own the worry, debts, anxiety and despair.

No wonder our insane hospitals are filled to overflowing and such diseases increase with the passing years.

Another aspect of this problem is worthy of note. During the past dark centuries of ignorance and credulity, the philosopher's stone was believed in and sought for; a stone that by its magical powers would cure all the ills of mankind. Forgetting or ignoring the fundamental discoveries of science, still the search goes madly on. Not today in the darkened rooms of the alchemists, but in bright, airy laboratories, still we search for the magic stone, not in minerals, but in coal tar syntheses do we look for the magic cure.

Have we forgotten? Must we be reminded that the digestive process is to break down the complex to the simpler combination? That if a highly complex chemical should get by and into the organism grave results may ensue? Can we not call to mind the many cases of blindness and sudden deaths by the synthetic arsenicals, the decayed livers of cinchophen victims, the suicides and death stupors of the devotees of the barbitals?

The prevalent citrus fruit therapy to replace a diminished hydrochloric gastric secretion in chronic disease will, in the writer's opinion, but throw out of the tissues the needed calcium salts. In syphilitic infections he has found that bismuth subsalicylate with iodine and naphthaline injections, at the same time giving the acid mineral solution with a mixed treatment tablet, most efficacious and free from all danger of nitroid reactions. To restore diminished hydrochloric acid secretion the acid mineral therapy is very satisfactory, also to relieve lymphatic congestion and removal of accompanying toxemia.

In place of barbitol for sleep this acid mineral therapy plus a migraine\* tablet on retiring or a sodium salicylate 5 grain tablet is curative, relieves and avoids the pernicious barbitol habit. The calcium therapy is restricted to growing children or to delayed cases of healing in bone fractures; the tetanic muscular symptoms where calcium availability is absent, are readily relieved by the acid mineral solution that renders inert calcium salts available for the biochemistry of life.

Let us return to simplicity. The magic stone that shall cure all diseases is not to be found in heavily endowed halls of synthetic chemistry, but in the humbler appreciation of the acid base balance; also in how to destroy worry, poverty, war and despair from the hearts and minds of humanity and in a simpler life, a simpler diet; with contentment and peace in life and soul, humanity shall yet find itself free from premature death and senile diseases.

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\*The migraine formula is as follows:

Acetanilid .....	gr. 2½
Camphor monobromate .....	gr. ½
Sodium salicylate .....	gr. 1
Ext. hyoscyamus .....	gr. ⅓
Tr. gelsemium .....	m. 2
Lactose .....	q.s. add gr. 5

## CHAPTER IX

### FERRUM, SILICON, BENZOIC ACID

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Iron, a white metal, atomic weight 55.84, is found very extensively in the animal organism in organic form; in the blood as hemoglobin; in the egg yolk as hemoglobin; in the liver as ferratin; in milk, bile, lymph, and in the urine. It is also found in the bone marrow, and in the spleen, probably as a mother substance or decomposition product of hemoglobin, as well as in the retina, hair, and also in malignant growths in the so-called melanin.

"Iron carries oxygen to tissues not only in the organism but also on the surface of the earth. In the body as hemoglobin it carries oxygen to the cells and returns to the lungs laden with carbon dioxide. Plant life absorbs iron in the inorganic form and converts it to the organic in plant albumen, which, when eaten by animals, is changed to hemoglobin. While in the plant itself, it seems to perform some function in the production of chlorophyl, although the latter, in its perfected form, does not contain this element. As hemoglobin contains approximately .05 per cent. of iron, a man of 70 kilos would probably have about 2.5 grams of iron in his blood, alone, which probably contains the greater part of the iron."—*Austin*.

Iron has a strong affinity for hydrogen. This property can be readily seen, if a weak solution of tincture of iron is added to dilute hydrochloric acid, by the change of color. It becomes of a light yellow hue, indicating ionization of the iron content. When water containing iron becomes too alkaline, oxidation occurs, as rust. This condition is very evident in the water supply of the city of St. Augustine, and doubtless in many other places. This city water, by the pH test to be given later—so that all may ascertain for themselves the alkaline content of a water supply—when boiled to remove a part, if not all, of the carbonic acid content, is approximately pH 8.4; in simple language, forty times more alkaline than pure water.



The pH indicator dye will permit every one to ascertain for himself, without any laboratory expense, not only the pH of a water supply of which the patient partakes, but also the pH of the patient's tissues. The author has been amazed by the pH values disclosed, not only in cancer victims, but in others not afflicted with that disease. It seems possible that by the use of this test a new era will come into medical therapy and in the present conception of systemic disease.

We have seen in the chapter on Potassium how, in corn plants, iron salts, by blocking of the nodes and sap channels, permit disease, rots, etc., to appear and destroy plant life; also how chlorophyl disappears from leaves. Can we not visualize a similar process in human pathology, especially so in the anemias of adult life, for iron deposits have been repeatedly discovered in varied organs of the body.

Two conditions are, evidently, required to hold iron as hemoglobin intact in the red blood corpuscles. Professor Hawk, already quoted, tells us that potassium is held within these red corpuscles in much larger amounts (nearly four times larger) than in the plasma. The other is a normal pH value, 7.35, of the blood. We have already ascertained that in plant life a deficiency of potassium causes a precipitation of iron oxide into the sap channels. When this potassium deficiency is corrected plants again grow tall and strong; their leaves again are no longer streaked or fired, but are green and full of life. When the acid mineral solution is given in cases of toxic anemia invariably the hemoglobin increases, also the red cell count, even though no iron be administered. Therefore, this result must necessarily indicate that the iron deposits have been again picked up by the eryocytes of the blood.

There is an undoubted close relationship between potassium and an alkalosis caused by a hypochlorhydria. Hydrochloric acid given alone, either by vein or mouth, will never change an alkalosis. It is very important to add potassium; it is requisite, too, to correct an alkaline water intake having excess of calcium salts, for the latter will interfere with all attempts to decrease the pH value.

When the writer gave his first article on this acid mineral therapy he advised the addition of the tincture of iron in the mineral solution. This formula is, indeed, most valu-

able in children or young people debilitated or infected with tuberculosis, or in anemia from loss of blood, as from a hemorrhage. It is, however, contra-indicated in adult senile disease caused by an alkalosis. It also is unfit for intravenous therapy as the iron content causes inflammation of the veins and also tends to formation of clots or embolism. 142 X

When iron is needed the acid mineral solution, plus tincture of iron, is seemingly much more effective than any other form of iron therapy; also most inexpensive; it is highly ionized and, as an acid chloride, is readily absorbed and does not blacken teeth or cause digestive disturbances. ✓

### *Silicon*

Silicon (atomic weight 28.2) is another element that seems to be lacking at times in the body tissues, especially so in senile years. It is found as a hydride ( $\text{SiO}_2$ ) in hair and bones, and in traces in the bile and urine. Silicon is found in nature as sand; it is everywhere; it gives strength to corn and flowers, causing them to keep erect and able to withstand breezes; it keeps bones and teeth strong. When deficient, the bones (as in old age) fracture readily. It may be a strong factor in senile alopecia or loss of hair. 10 Silicon is supplied by the pericarp of wheat and corn as in bran and coarse meals. Only a trace is needed. It has been found useful in chronic ulcers as in tuberculosis and other skin diseases; also in constipation. Time may disclose that the laxative action of wheat bran may not be so much due to the roughage, as it is called, but rather due to its silicon content, for not all obtain relief by use of bran and any relief is usually of a temporary nature.

In the treatment of senile disease, the writer feels that its presence is helpful. Only a trace of silicon can be put into the acid solution but, as the human tissues contain but a minute amount, a trace, or one or two milligrams per ounce, is all that is necessary. The details of the formula are given later.

If silicon be not needed it will be thrown out of the body by the digestive functions, if an organism is deficient in this mineral, being so finely divided in an acid solution, it can be readily absorbed. Alopecia or baldness is but a sign of the degenerative or destructive aspect of life. It may appear early or late and should be considered with other aspects of

tissue pathological changes. By the administration of a solution of the acid mineral containing silicon the advent of other degenerative changes may be prevented; also the continuous loss of hair. As an example, but yesterday, the author examined a tall, well-built man of forty-five years of age from Pennsylvania. His family physician had assured him he was all right. "There is nothing the matter with you," he told him. Yet this patient told of sudden attacks of dizziness, almost a loss of consciousness at times while sitting at his desk but not occurring when walking. The following conditions were found on examination by the writer: A pronounced alopecia, a scar from an operation some years before for appendicitis, hypotension, an enlarged liver, an enlarged heart, the heart sounds quite feeble and muffled, valves not damaged, and also a gaseous fermentation, doubtless causing the attacks of vertigo. It was evident that though this man had not symptoms of angina pectoris, yet degeneration of hair cells, heart cells, and liver tissues was quite advanced, and he was in danger, if he over-exerted, of falling dead from heart failure. This degenerative process had started years before, as evidenced by the attack of appendicitis, indicating a lowered immunity against infection, and also by an early loss of hair. The treatment given was the acid mineral solution with potassium and silicon to supply these minerals, also to increase the hydrochloric acid content of the gastric juice and thus reduce the pH value of tissues. This acid mineral solution, therefore, should correct an alkalosis, eliminate retained toxins, increase the chlorine content of the gastric juice, open up the blocked lymph channels or vessels in heart, liver and other organs or tissues; the increased lymph supply will then rejuvenate the body cells; the increased potassium salts strengthen the heart muscles, and the silicon should stop the falling out of the remaining hair. What else? Simply this: That an increase of normal gastric acid must stimulate the liver cells to a greater activity; also increase the production of bile; by changing the flora of the digestive tract, the fermentation and gas formation will be greatly ameliorated and the attacks of vertigo, doubtless caused by pressure of gas in stomach or transverse colon, will cease. Still we can say more, for, as the con-

gestion of the liver is relieved, the circulation, not only of the lymph but also of the portal venous supply, will become more normal, and the heart muscle will be greatly aided in its work by the opening of these congested channels. Some will ask, "What was this man's blood pressure?" The systolic pressure was about 90, indicating a pronounced myocardial degeneration. This man quickly responded to above treatment.

### *Benzoic Acid*

Benzoic acid is obtained by sublimation of gum benzoin; at present like salicylic acid, it is probably synthetic. It is in feathery white crystals of a silky luster, and has a fragrant, vanilla-like odor. The taste is warm, acrid, peculiar. Benzoic acid is soluble in 400 parts of cold water; 18, of boiling water; 2 or 3, of cold alcohol; 1.5, of boiling alcohol; 4 to 5 parts of chloroform; 3 of ether; also soluble in fixed or volatile oils. It is a feeble acid, but forms neutral salts with the alkaline bases. Benzoic acid is widely distributed throughout the vegetable kingdom, as in cranberries and plums; it is also found in the urine of grass-eating animals, probably as hippuric acid. ✓

It is used to acidify alkaline urine and is especially valuable in cystitis, phosphaturia and prostatitis. It is also used externally as an antiseptic in a one per cent. dilute alcoholic solution and from 2 to 10 per cent. ointment for favus, tinea circinata and urticaria; also to prevent rancidity of fats as in benzoinated lard. An average dose is 15 grains. It is incompatible with ferric salts, mercuric chloride and lead acetate. ✓

Benzoic acid is germicidal and antiseptic; when neutralized, it forms neutral salts; it is non-irritating, absorbed by the digestive organs, and eliminated through the kidneys as hippuric acid. Very large doses seem to be well tolerated. It is widely used in food products to prevent rancidity, molds and fermentation, and, taken in small amounts, has seemingly no deleterious action. It has, however, the property of causing urine to become acid; this would indicate that, in small amounts, it is capable of lowering the pH of the body tissues. ✓

It was for this reason chosen by the author to endeavor to ameliorate or prevent cancer growth. As Dr. Ellice Mc- ✓



Donald has stated so emphatically that if, by some biochemical means, the alkalosis of cancer cells could be lowered, they should lose their embryonic properties of rapid mitosis and become normal. For this purpose the author first dissolves it in alcohol, then adds one-fourth of dilute hydrochloric acid with a minute quantity of silicic acid. The full formula is given later. This mixture supplies benzoic acid in solution in small doses, combined with a 2.5 per cent. of hydrochloric acid. This acid mixture gives off not only benzoic acid but also free chlorine ions and minute traces of silicic acid.

So far, in every case treated, most happy results have been seen, not only in cases of prostatitis and cystitis, but also in cases of undoubted cancer. Today the author is prone to consider those cases that respond favorably to the above solution as pre-cancerous or cancerous; the other class as patients with a potassium deficiency underlying so many progressive and oftentimes intractable diseases. This benzoic hydrochloric silicic acid solution can be given intravenously with good results with no systemic disturbances.

Many cases are found where a diagnosis of malignant disease is possible, yet no lesion (except perhaps when too late) is discoverable. As the benzoic acid solution is seemingly harmless, it can be used to advantage in such cases. A favorable response to the administration of the remedy would indicate that an alkalosis was probably present accompanying or preceding a cancer invasion.



## CHAPTER X

### THERAPEUTICS OF NAPHTHALINE

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Naphthaline or naphthalinum, known to the laity as tar camphor, is a most potent chemical, a powerful germicide and very poisonous to low forms of life. It is a white, shining, crystalline substance, melts at  $176^{\circ}$  and is insoluble in water, but readily so in oil, ether and chloroform. It was advocated by Dupasquier many years ago as a remedy for chronic bronchitis and as a vermifuge locally in oil for seatworms; also by Rossback, of Jena, for intestinal inflammation and typhoid fever, and as an antiseptic dressing and a local treatment for various skin diseases.

The internal dose is 2 to 8 grains, but as much as 80 grains have been taken with no injurious results.

Being insoluble in water, attempts were made to increase its solubility by treating it with sulphuric acid and alkalies. Two derivatives were prepared, alpha and beta naphthol, the second of which is official.

Some years ago the writer made a clinical study of naphthaline, the results of which have been so striking that he wishes to put them on record so that they may not be lost.

It was early proven that beta naphthol as a therapeutic agent is by far inferior to naphthaline, more irritating and less effective. To make naphthaline soluble it was dissolved in chloroform, then wormseed oil was added; also a small quantity of a saturated solution of iodine in chloroform; then mixed with lactose and put into capsules, so that each capsule contained 1 grain of naphthaline, 1 minim of wormseed oil and a trace of iodine, the excess chloroform evaporating during the process.

Next, the writer did as all investigators should—took them himself, with a decided improvement in digestion and appetite.

Looking around for the next subject, he saw his dog coughing and raising frothy blood. Down went two capsules into the dog. Results: Blood disappeared and two or three

days later coughing stopped. (Animal hookworm in cats and dogs causing "creeping eruption" is well known here and will be mentioned again later.) Again the writer looked about for other possibilities. Soon a woman near to death, presumably with cancer of uterus, down to 96 pounds, temperature  $104^{\circ}$ , terrible hemorrhages, was found and put into hospital to die in comfort, the surgeons agreeing with diagnosis. To make her content, naphthaline capsules were given to her three times daily. Within three weeks' time word came from the hospital to take her home; "she was all over the place." To our amazement, examination showed that the tumor had almost disappeared. Was it an effective remedy for cancer? Further investigation proved, however, that her husband, some years before had been to a religious convention, where his foot slipped from grace and he had contracted syphilis. He showed symptoms of lung and heart involvement, of which he later died. hs?

The remedy, however, was becoming quite interesting and other cases were sought. Before long a mother brought a little boy, emaciated, signs of congenital syphilis present. History: For several years he had eight major grand mal convulsions every day and four every night. The mother had spent all her few spare dollars, made so laboriously in the cotton fields of South Carolina, for doctors with no results. Another chance to try naphthaline. Twenty-one capsules were given her, one to be given the boy three times daily. On their return this was her story: She gave one that first night. Results: Instead of four attacks, but one big one and one little one, and no fits after that. He was treated for one month. No return of convulsions to date. rhy not  
syst M

This amazing and seemingly miraculous result, of course, caused hopes of another similar case, and it soon appeared. A girl of 16 years, with a history of several petit mal attacks daily, a grand mal convulsion every three or four weeks, also had a paralytic weakness of feet supposedly caused by an attack of infantile paralysis when a child. She was given one capsule three time daily. She obtained immediate relief; also the condition of feet was also overcome after three weeks' treatment. No return of trouble and now happily married. Idiopathic epilepsy, sad to say, does not appear to respond to this remedy.

Still other cases were sought. Hearing of several cases

of helpless tic douloureux, or trifacial neuralgia, in Massachusetts, through other patients, the capsules were mailed to these people. Again another victory; also a few cases of neuritis reported relief, such as sciatica. One case of this trouble was in hopeless condition. ✓

Let us return to its use as a remedy for worm infestation. The writer has found it reliable and effective in all kinds of worm infestation. Tapeworms, hookworms and roundworms are rapidly *killed* by its administration. Recently a most distressing case of creeping eruption (*uncinaria trigonoccephala*, or cat hookworm) came in utter despair. He was literally covered by the eruption. He had not slept for three weeks. His medical advisor had frozen him with ethyl chloride, saturated his skin with ammoniated mercury ointment until he was salivated, and his friend came in every night to open the nests of eggs with a razor. One night his friend opened over 150 of these vesicles. Itching was uncontrollable and the patient (a white carpenter) was in a bad nervous state. ✓

Another chance for naphthaline. A few moth balls, one to the ounce, with petroleum oil, were cooked together, a solution of iodine added and a beautiful purple solution was quickly made, to be rubbed in frequently. Results were, as usual, spectacular. This man slept four hours the first night and in three weeks all signs of eruption had disappeared, though lungs and intestines were, however, badly infected. High fever, vomiting of blood and intestinal symptoms developed. These were controlled by cupri arsenite, gr. 1/100, then three weeks ago the naphthaline capsules were prescribed, with the result of a gain in weight of seven pounds in one week and normal health. There is, to the writer's knowledge, no record of man being a host to this form of worm infestation, but this case indicates its possibility, although, owing to patient's peculiar disposition, it was impossible to have stools examined for ova and worms. ✓

As might be expected the above drug is valuable in parasitic skin diseases. A family of children was found, all of whom were infected with *tinea capitis*, or ringworm of scalp; one child was almost bald. Naphthaline was applied in oil ✓

as in the previous case. Within a few weeks complete recovery occurred and the hair was restored.

One case of seborrhea of the scalp of years' standing reported satisfactory results.

The writer has used it in shot wounds and diseases of feet such as infection of nails and athletes foot and has found it very reliable.

So much for syphilis and worm infestation. Can naphthaline be useful in other forms of disease? Because of its affinity for brain and nerve tissues, its high germicidal qualities, it should be found curative in mental diseases. Is it not indicated, for instance, in those cases of progressive insanity reported by Dr. H. R. Keyes, of Los Angeles, who has repeatedly discovered low forms of parasitic life in the intestinal tract of various forms of progressive insanity? Surely this old, and yet unknown, drug might be found most helpful in such conditions. It may be argued that it is dangerous, but there are no records to that effect. It is reported that men inhaling its fumes in factories get dizzy or drunk, and that it is said to be used at times in the stills of Georgia, making a most potent beverage so that after one drink the victim will "lay"—therefore "chicken hooch." If the writer were able, he would try it in leprosy; also to destroy the trepanosomes of African sleeping sickness and by results so far obtained would expect curative results.

## CHAPTER XI

### LIFE

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In our previous work\* it was emphasized that there is but one cause of creation; one universal emanation back of all the varied phenomena that we call life. The sky, suns, and planets—the varied kingdoms of this world and the worlds beyond human ken—are created, sustained, and go forward in their evolutionary path because of an unseen emanation beyond human intellectual conception. If this emanation from the heart of the universe should cease, all material phenomena would disappear, the electrons, protons, atoms, etc., would cease to be.

It is the recognition of this primeval yet ever present law of life that alone can give us the key to the varied aspects of life—health and disease.

The hidden and the manifest can be found in and back of all life's manifestations. We may call them spirit and matter, heat and cold, life and death, construction and destruction, but these are but the inevitable pairs of opposites, and within and unseen lies an unknown urge, force or emanation beyond human conception or consciousness.

A common example is that of electrical energy. It is unseen, intangible, beyond comprehension of the senses, yet we know it exists, is ever present, because of the variety of its manifestations. Long before man learned how to use it, the lightning flashed; amber, when rubbed, attracted or repelled; and as its possibilities become more and more understood, as seen in radio activity, and elsewhere, electricity is shown to be similar, if but in a lower degree, to life itself.

Back and within all the phenomena of life—from the mineral world to the spiritual—we see operating these pairs of opposites just as we discern by the study of electrical phenomena similar effects. We talk of anodes and cathodes, positive and negative poles, induction, magnetism, attraction and

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\*"Hydrochloric Acid and Mineral Therapy," 1934.



repulsion and electrical fields and in all the different kingdoms of life we find similar phenomena.

The mineral world has its attractions and repulsions, certain atoms will rush to or combine with some atoms and are repelled by others.

Man contains within himself all the kingdoms of nature. In him are the mineral, vegetable, animal, and the human worlds, the specialized organs, and human reason, that lifts him above the level of the brute and connects him with the spiritual world. This spiritual world above and beyond the conscious range of the five senses, nevertheless, becomes manifest through the higher centers of consciousness such as ideals, truth, philosophy, art and music; and this kingdom of consciousness plays a most important part in the function and metabolism of the human organism.

The writer claimed in his previous work that but one law of life is manifest in all these kingdoms: ("As above so below" is an old truism) that this same law is manifest in the growth, for instance, of a stalk of maize as in the digestive organs of man. For this we were severely criticized by an editor of a prominent British journal. He terms the above claim as "critical confusion" and our statement that potassium deficiency exists in anemia, as "a very dangerous statement to make." Yet his sweeping criticism discloses but a superficial knowledge of natural law. The photo-synthesis of chlorophyll that absorbs carbon dioxide and releases oxygen is but a special cellular function of plant life compared, if you will, with glycogen function of liver; when night comes on, photo-synthesis ceases and plants no longer pick up, but, instead, like animal life, give off appreciable amounts of carbon dioxide.

Protoplasmic cellular life is wholly dependent upon a balanced equilibrium of all the factors involved, such as heat, food, minerals, light, vitamins, hormones and water. It is also dependent upon a central control of the complex nervous system; that is, the cerebral spinal currents, the vagus, and sympathetic system. Not only must this automatic sympathetic system regulate the varied functions of the body in the digestive, reproductive and respiratory systems, but also the circulatory system; with the vagus or para-sympathetic it regulates the beat of the heart, blood pressure, and blood supply.

The sympathetic system is the connecting link with the kingdom or sphere of the emotions; awake or asleep, these nerve centers are receiving continuously impacts that in a large measure determine the harmony of the vital functions.

It is, however, a truism largely ignored that the blood, itself, circulating so rapidly through its vessels, does not feed the protoplasmic cells directly, but only indirectly; that between the blood and the cell there is another system that is also in constant circulation, though slower than the blood, and this medium is known as the lymph.

The human organism has been called a microcosm, that lives in the macrocosm or universe. In that sense, the blood might be termed the river of life that through its vessels and capillaries pours its plasma into an ocean of life—the lymph system, that, although cleansed by the blood stream, nevertheless is the food supply of all the protoplasmic cells of the organism.

In *Gray's Anatomy* we find the following description of its vessels, channels and protective glands:

"The lymphatic system is an appendix to the blood vessels, the latter, especially the capillaries, supplying the oxygen and food to all the tissues, the former carrying off most of the waste products, and also acting as absorbents. The lymphatic vessels arise in several ways. One is in lymph spaces of the connective tissues. Another is in the lacteals, vessels in the intestinal villi, which begin by blind or closed extremities. A third origin of the lymphatics is in the perivascular and peritoneal neural spaces. These exist especially around the smaller blood vessels of the nerve centers, the bones, the retina, liver, and under the sheath of the optic, and some other nerves. A fourth origin is by stomata or openings between the endothelial cells lining the walls of the large serous cavities. The serous cavities, the arachnoid chambers of the eyes, the tunica vaginalis oculi, the labyrinth of the ear, the pleura, the pericardium, the peritoneum, and tunica vaginalis testis, are all, therefore, lymph sacs, hence their great absorbing power."

In *Nelson's Encyclopedia* we find the following lucid description of the lymphatic system:

"*Lymph* (Lat. *lymph*a, 'water') is a clear, watery, albu-

minous fluid which bathes all the tissues of the body. It is faintly yellow or colorless, and is alkaline in reaction. Derived from the blood, it laves and nourishes the tissue elements, and returns to the circulation by the lymph vessels, bringing such pabulum as the tissues do not immediately require for their nutrition. It is poured into the large veins near the heart, and in its course through the lymphatic vessels and glands it acquires a number of cells known as lymph corpuscles, which on reaching the circulation become the lymphocytes of the blood. During digestion the lymph returned from the villi of the small intestine becomes charged with fatty molecules and extractives from the food. These change its character, giving it a milky appearance, so that the vessels are known as lacteals and the lymph as chyle.

*“Lymphatics* are the superficial and deep vessels and glands which carry lymph throughout the body. The vessels are tubular, and their walls have three thin coats—epithelial, muscular, and fibrous. Like veins, they have valves formed of semi-lunar flaps, which direct the outflow of the lymph. The lymph enters the lymphatic capillaries by rootlets arising in the spaces between connective tissue cells, muscular fibres, etc., and by minute stomata or apertures between the epithelial cells or serous surfaces. There is no direct communication between the capillaries of the blood and those of the lymph, which must, therefore, irrigate intermediate tissues on its way from one set of vessels to the other. From the network of lymphatic capillaries small lymphatic vessels arise, which either anastomose into larger trunks or pass to a lymphatic gland. The thoracic duct is the terminal trunk of the system. This duct conveys the chyle and the greater part of the lymph into the left subclavian vein at its junction with the internal jugular. The lymph from the right side of the head, neck and chest, and from the right arm, is carried by the right lymphatic duct to the right subclavian vein. In the course of the lymphatic or lacteal vessels through the mesentery and thorax, and more superficially in the neck, groin, armpit, and popliteal space, are numerous glands, generally kidney-shaped, and varying from the size of a hemp seed to that of an almond. In man the onflow of lymph is largely enforced by

the respiratory movements, but some lower animals possess pulsating lymph hearts which supply the motive power.

"From their powers of absorption, the lymphatics are specially liable to be infected by a poison introduced into the tissues. Tubercle bacilli spread from gland to gland, and frequently lead to caseation and to suppuration. New formations, if at all malignant, also advance by means of the lymphatics. Thus sooner or later a cancer of the breast involves the axillary glands. Apart from such secondary invasions, the lymphatic system is sometimes the primary seat of disease, which may vary from a comparatively insignificant lymphoma, or increase of the adenoid tissue, on the one hand, to a lymphosarcoma of extreme malignancy on the other."

The physiological aspect of the lymph, however, is most important. From *Practical Physiological Chemistry*, by Phillip B. Hawk, Ph. D., we have taken the following masterly description of its chemistry and function in organic life:

"Lymph may be considered as the 'middle man' in the transactions between blood and tissues. It is the medium by which the nutritive material and oxygen transported by the blood for the tissues is brought into intimate contact with those tissues and thus utilized. In the further fulfillment of its function, the lymph bears from the tissues, water, salts and the products of the activity and catabolism of the tissues and passes these into the blood. Lymph, therefore, exercises the function of a 'go-between' for blood and tissues. It bathes every active tissue of the animal body, and is believed to have its origin partly in the blood and partly in the tissues.

"In chemical characteristics, lymph resembles blood plasma. In fact, it has been termed 'blood without its red corpuscles.' Lymph from the thoracic duct of a fasting animal or from a large lymphatic vessel of a well-nourished animal is of a variable color (colorless, yellowish or slightly reddish) and alkaline in reaction to litmus. It contains fibrinogen, fibrin-ferment and leucocytes and coagulates slowly, the clot being less firm and bulky than the blood clot. Serum albumin and serum globulin are both present in lymph, the albumin predominating in a ratio of about 3 or 4.1. The principal inorganic salts are the sodium salts (chloride and bicarbonate),



whereas the phosphates of potassium, calcium, magnesium and iron are present in smaller amount.

"Substances which stimulate the flow of lymph are termed lymphagogues. Such substances as sugar, urea, certain salts (especially sodium chloride), peptone, egg albumin, extracts of dogs' liver and intestine, crab muscles and blood leeches are included in this class.

"In a fasting animal, the lymph coming from the intestine is a clear, transparent fluid possessing the characteristics already outlined. After a meal containing fat has been ingested, this intestinal lymph is white or 'milky.' This is termed chyle and is essentially lymph possessing an abnormally high (5-15 per cent.) content of emulsified fat. This chyle is absorbed by the lacteals of the intestine and transported to the lower portion of the thoracic duct. Apart from the fat content, the composition of lymph and chyle are similar."

In the vegetable world this watery fluid is known as sap. It varies greatly in chemical and mineral constituents in various species of vegetable life, even as the lymph varies in different species of the animal kingdom. Some plants contain sugar, such as maple trees; others contain rubber, etc; yet underneath is found the same law of nutrition, the supply of oxygen and the carrying off of the waste products of life.

The purpose of this book, however, is not to discredit any known specific and established medical treatment but, instead, to focus for a while the reader's attention upon the anatomy and physiology of the lymphatic circulation, to show how this overlooked and ignored lymph plays a most important role in metabolism; and to show later on how, when disease is present or imminent, lymph dysfunction may be the crucial underlying factor that, recognized and properly treated, may bring health or cure to apparently hopeless cases of hitherto intractable disease.

The circulation of the lymph stream is of a slower velocity than that of the blood. In low forms of animal life, lymph alone is the medium of life; as the evolutionary urge or spirit caused the formation of more complex organisms, in order to express or act as vehicles to a higher degree of consciousness, the blood became necessary that, flowing more rapidly, gives



a more rapid response to the needs of the cells, which motion, and function of brain and the special sense organs demand.

When, however, the circulation of lymph, or middle man between blood and cells, as Professor Hawk terms it, is impeded, varied disease phenomena must ensue. The purpose of this book primarily is to emphasize this much overlooked phenomena, leaving other books to cover diseases outside the scope of this dysfunction. Lymph stasis, as this stoppage is generally termed, must be the crucial factor, not only in acute conditions—the sudden oedema of lungs or glottis, the swelling of skin, as in urticaria and insect bites—but also in the more chronic diseases. It is readily recognized in anasarca and dropsy, is found in diseases of the heart and liver, but generally overlooked in the senile degenerations and hypertrophies of the varied organs of the body. Cancerous growths are also involved in a lymph stasis. ✓

Dr. W. Sampson Handley states: "The evidences that cancer arises in districts where, for long years, there has been a long lymph stasis, impairing the nutrition of the cells, was first stated in a paper read in Cleveland in 1926." Further on he states: "I consider it a fair inference that hypertrophy was a result of lymphatic obstruction. The influence is irresistible when one considers the pathology of elephantiasis, with its great thickening of the subcutaneous tissue, and its papillary hypertrophies—undoubtedly due to lymphatic obstruction."

The following is an extract from *Cancer*, by Frank E. Adair, M. D., F. A. C. S., pages 69 to 71:

"I have thus described the effects of obstruction of a papillary lymphatic:

"The papilla is a little physiological engine. From its blood capillaries there exudes into its connective tissue spaces a constant nutritive stream of diluted blood plasma at a certain pressure. The excess of fluid is removed and the equilibrium maintained by the drainage action of the central lymphatic. Block this lymphatic and what will happen? The first effect will be a rise in the pressure in the intercellular spaces of the papilla, and on ordinary hydraulic principles the papilla will increase in size until the intercellular pressure is equal to the pressure in the capillary blood-vessels. A second effect will be over-nutrition and consequent proliferation

of the papilla, itself, and of the overlying epithelium. But the most important effect of all for our present purpose remains to be considered. In the normal papilla a constant stream of blood fluid, along with lymphocytes, is exuding from the capillaries and passing away by the lymphatic. As soon as the lymphatic is blocked, stasis occurs and the flow of fresh blood fluid through the papilla is arrested or greatly retarded, even though just as much blood may be passing through its blood capillaries. Two consequences are inevitable: The supply of oxygen to the tissues of the papilla, to its epithelium as well as to its connective tissue, will be much reduced; furthermore, the supply of hormones to the cells of the papilla will be cut off or greatly diminished. In this connection I use the term 'hormone' perhaps somewhat loosely, to signify those products of the rest of the cells of the body which are necessary to the well-being of the cells of the papilla we are considering. Here, I think, we approach the crux of the problem.

"Local lymphatic stasis brings about a definite rupture of the contract in virtue of which the unicellular organism originally foreswore its egotism and became a social unit. Or, in the terms of biochemistry, the epithelium covering the papilla is deprived of the supply of growth-inhibiting substance, which in a well-conducted cell community is circulated to every cell.

"I have shown that local lymphatic obstruction must seriously reduce the supply of oxygen to the epithelium of the blocked papilla. It would not be surprising if, in the course of years, the affected epithelium, adapting itself to meet this difficulty, should acquire a type of metabolism in which oxygenation played a relatively subordinate part. Warburg has recently brought forward strong evidence that the carcinoma cell, as compared with the normal epithelial cell, is an anaerobe, deriving most of its energy from the hydrolysis of sugar into lactic acid, and relatively little from oxidation. This remarkable fact is in exact accord with the theory of the origin of cancer which I am presenting to you. It must not be forgotten that in dealing with such a complex matter as the origin of cancer, direct proof is, in the earlier stages, not to be expected. All that can be hoped is to fit together the isolated facts into a coherent pattern.

"In remarkable accord with the view that lymph-stasis

is the great general physiological factor which lays the foundation of cancer, is the flood of evidence coming from many quarters that papilloma or adenoma is the precursor of carcinoma of every variety. This is universally the case in the occupation cancers such as sweep's and paraffin cancer, in cancer due to parasites such as gongylonema (Fibiger) or bilharzia, in the experimental cancers due to tar or X-rays, and evidence is continually increasing that large clinical categories of cancer, such as cervical cancer (Bonney), breast cancer (Cheatele and Handley), rectal cancer (Mummery and Dukes) and gastric cancer (Menetrier), are preceded by papillomata or adenomata. ✓

"If, as I maintain, the papilloma or papillary adenoma is the characteristic product of local lymphatic obstruction, we are getting near to the conclusion that all carcinomas are the result of local lymphatic obstruction. The mysterious action of such varied chronic irritants, all producing the same final result, received for the first time an intelligible explanation. They act by setting up a local chronic obstructive lymphangitis of the part to which they are applied, which leads after a time to the production of warts, or adenomata, and after a further interval to the genesis of carcinoma. Congenital malformation of lymphatics, seen in moles or naevi, also produces lymph-stasis, warts, and sometimes carcinoma." ✓

It is obvious, however, that but few cases of lymphatic stasis develop into malignant or even benign neoplasma. All chronic congestion or inflammation of any organ of the body is accompanied by a lymphatic stasis, for it is obvious that if the blood circulation were blocked gangrene would appear, as seen in advanced cases of diabetes. This lymph fluid, pouring constantly from the papillae of the minute arterial capillaries, if its progress onward to the heart be impeded by a blockage, this blockage must cause a congestion of the area involved and a tension equal to the pressure of blood in the arteries. This is seen, for instance, in contusions, septic infection, furunculosis, and in the convulsions caused by an increased intracranial pressure, as in Jacksonian epilepsy and other diseases of the brain. ✓

If but an incomplete stasis occurs, coming on by slow, imperceptible degrees, we have instead a low grade congestion or

inflammation, sometimes accompanied by a hypertrophy of the tissues involved, as seen in heart, kidney, liver, prostate and other organs.

The varied aspects of lymph stasis clearly and decidedly indicate that there must be various causes of lymph stasis. For instance, in acute asthma—that may come on suddenly during sleep, much to the discomfort of the physician called to relieve it—this may be an allergic toxic condition, perhaps due to a deficiency of the suprarenal hormone, and is at once relieved by the subcutaneous injection of a few drops of adrenalin, while an obverse condition may arise as in edema of lungs or glottis by an injection of the same solution, as well as from other causes.

Lymph stasis then has many varieties and conditions ranging from a profound accumulation in extremities, in advanced cases of heart and kidney affections, to the minute areas of stasis seen in the slow degeneration of various organs and incipient forms preceding both benign and malignant tumors or lesions.

Later chapters will take up this problem in its various aspects, and indicate how, before any treatment can be prescribed, the different factors causing lymph stasis and consequent congestion, edema, or degeneration must be recognized and fully understood.

There are necessarily two forms of lymph stasis, perhaps a third: An efferent stasis of the lymphatic vessels that carry the lymph with the acquired waste products of metabolism back to the blood to be excreted by liver and lungs; this condition of blockage is seen in diseases of the heart and kidneys in forms of edema of extremities and of skin. Again we see it in thrombo-phlebitic edema, or milk leg seen after child birth, when swelling and consequent blocking of the lymphatic glands in thigh or groin causes a stasis of the efferent channels; this stasis is also seen in septic infection of arm and in the brain, as in tuberculosis of the meninges.

The afferent lymph stasis is, however, to us, in reference to senile and degenerative diseases, more important, for, if the nutrition by the lymph be cut off or diminished to any appreciable degree, then progressive weakness and degeneration of cellular life must appear; arteriosclerosis, myocardial de-

generation, arthritis, diabetes and senile insanities occur and must have their origin from this form of lymph stasis and cause, therefore, a nutrition deficiency.

In contusions severe enough to cause destruction of tissues, probably both aspects of lymph stasis are present. If, as we shall later show, a decided alkalosis of the pH reaction be present, cases of bone and other injuries may degenerate into cancerous disease.



## CHAPTER XII

### LYMPH STASIS

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We have seen in previous chapters how mineral unbalance and deposits cause blocking of sap channels in plant life. Also how both iron and aluminum are poisonous to human life. Still untouched lies the vast field of senile degenerative disease.

Degeneration of tissues is found, however, at all ages, but more particularly in senile years. The trite saying, "A man is as old as his arteries" indicates that, as old age inevitably creeps on, more and more biological tissues become a prey to degeneration in all its widely varied aspects.

This book is neither concerned with the description of these aspects or signs of disease, nor with the symptoms nor pathological changes that inevitably appear. This information can be acquired in any authoritative text book. What the writer hopes to do is to point out the underlying factor in the various aspects of degeneration. This factor, discovered and fully understood, will enable the medical practitioner to conquer and, better still, prevent the ever-multiplying cases of degenerative disease.

7 We have seen how nature has arranged to keep in balance the acid base reaction or pH of the tissues by and through the gastric hydrochloric acid. It is this acid secretion that becomes diminished, especially in senile years, and very often in childhood. Because of this diminished output of normal acid, certain inevitable results occur—a deposition of waste products into the spaces or vessels of the lymphatic system, and these deposits cause, first a slowing down of the nutrient fluid, and, later, a blockage of the minute microscopic canals.

In order for life to continue, the pH of the tissues must be kept within definite limits. All else is sacrificed to this balance. If insufficient hydrochloric acid be secreted, other acids must be relied on, such as lactic and carbonic acids. These acids, however, when combined with basic substances that are set free by the digestive and metabolic processes, produce lac-

tates and carbonates. Such salts, being alkaline in comparison to the chlorides, are more difficult to eliminate, especially in a slow-advancing alkalosis. Therefore, they accumulate and are precipitated into the minute lymph channels of various tissues and organs.

It is difficult to modify and rebuild long-established conceptions of degenerative disease. Older practitioners, long accustomed to consider the blood as the source of all nutrition and repair, find it difficult to realize that the cells of the heart and the minute capillaries are not directly nourished by the blood which continually streams through these vessels, but that there is another circulation, which supplies the needs of all cells and carries away the waste of all cellular life.

The minute lymph channels become closed to a greater or less extent before degeneration begins. The particular cell, organ or tissue, which is cut off from its nutrient supply, determines the site and nature of the disease.

Senile degeneration is a slow process; it is insidious and progressive unless stopped. For instance, a concise description of arteriosclerosis is given as follows: "Chronic vascular affection characterized by thickening, hardening and loss of elasticity of the arterial walls, with inflammatory degenerative or hyperplastic change, may be circumscribed or diffused. It may be a fatty, sclerotic or a hyaline degeneration, dependent upon which cells are involved also nature of waste or toxins involved in the lymph stasis."

Its causes are given as (a) old age, (b) hypertension, (c) syphilis, (d) alcohol, lead, gout, toxins from deranged metabolism, (e) muscular over-exertion, (f) renal disease, (g) over-eating, (h) stress and strain of high-pressure life.

Under the term diagnosis we are taught to look for hypertension of arteries, hypertrophy of heart, nervousness and irritability, failure of memory, frontal headache, dizziness, dyspnea (difficult breathing), dyspeptic symptoms (substernal distress) either spontaneous or on exertion.

"Arteriosclerosis may attack brain, eyes, heart, kidneys, and the general circulation with all the varied symptoms." *Merck's Manual.*

Not a word is given to the lymph circulation that nourishes and cleanses these tissues. A deeper etiology of the ar-

✓  
✓  
on if true  
and Arteriosclerosis

teriosclerosis would lead to this query: What has caused this failure of nutrition in the arteries and capillaries of the organs affected? Why do these circulatory vessels of the brain or heart or kidneys degenerate? Are their cells properly nourished, their toxins removed by the lymph stream? If not, then why not?

A physician would then search for the cause so necessary for relief. Is this condition due to tobacco, syphilis, sepsis (as from teeth), or is it caused by an alkalosis or, in other words, due to a deficiency or absence of the gastric hydrochloric acid? Such a search would be provocative of results. When all causes except hydrochloric acid deficiency have been eliminated and this normal acid restored, curative results must indeed follow; for as we shall show later by clinical reports, most gratifying benefits appear by the administration of the hydrochloric acid mineral therapy. *R. W. Rogers, Elements of Hygiene, 1904*

We shall show that recognition and treatment of an underlying lymph stasis, impeding nutrition and retarding waste, is a factor in all diseases no matter what organ or site is involved. Lymph stasis is caused by contusions, fractures, the protein poisons of infectious diseases, allergic reactions, cardiac and renal deficiencies, etc., and will be shown to be a most important predisposing factor in cancer, tuberculosis, and syphilitic diseases. We shall also see that the acid-mineral treatment is a most beneficial adjuvant in cases of septic infection, in treatment of syphilis, malaria and tuberculosis. In short, if lymph stasis can be ameliorated, the nutritive lymph fluid again supplied to diseased cells, their waste removed; if the lymph channels can be unblocked, then nature, which alone heals, is greatly helped through and by the administration of hydrochloric acid and needed minerals; and whether given by mouth, vein or muscles, only good results can follow.

All physicians have seen the hypertrophied joints or fingers of senile patients; all have seen hardened arteries and the distorted joints of arthritis, cases of contracted kidneys and degenerated heart muscles, as seen for instance in angina pectoris, senile insanities, etc.; but how many physicians have looked underneath and back of these varied symptoms and disabilities, and have realized that, before these diseases appeared, the lymph channels became blocked, a lymph stasis had

been set up and the metabolism of these areas had been seriously affected. 4-14-1911 150  
ethology 700

Let us go back still further into the chemistry of life and realize that back of all disease phenomena lies the problem of the acid base equilibrium.

What would one think of a physician who, in treatment of his cases, utterly ignored the nutrition and excretion of his patients? Yet this is absolutely the state of medical art (not science) of today. We utterly ignore the nutrition and excretion of the cells of the diseased organs.

Degenerative diseases go under many aliases. For instance, when our famed Thomas Edison died, the press reported six different diseases. The writer has now under his care a man eighty-four years of age who, in a Chicago hospital, had had three cancerous lesions removed from under his tongue and right side of face, leaving impaired speech from the injury to tongue. A history of a loose cough for thirty years and gurgling of phlegm during sleep, a marked degeneration of the myocardium, with septic vegetations on aortic valve, a severe keratosis of skin, the back of his hands greatly fissured and thickened, kidneys involved, and a cancerous, stony hard growth at neck of bladder, with pus and ammoniacal urine; also a sarcoma of left elbow. This patient has been taking the hydrochloric acid mineral treatment for three years. ✓ 34 The result is most gratifying; the skin and elbow are now normal, the cough has almost disappeared, the growth in bladder neck was dilated to 18 F, his speech is perfect, and his bladder function has greatly improved. His urine is clear and no longer offensive; his left elbow is now of equal size with his right and normal in every respect, and no further cancerous lesions have appeared. Also bronchial expectoration has almost ceased. This case demonstrates how this hydrochloric acid mineral solution, acting, as it does, upon the lymph channels, restores nutrition to cells and eliminates toxins, corrects the underlying alkalosis, and is a most reliable treatment for senile diseases. This case, like that of Edison, under the present style nomenclature would have been cited as a complication of widely varied diseases. Let us cite them to illustrate our point. This man would be described as one afflicted with senile keratosis, bronchiectasis, sarcoma, myocarditis, epithelioma, carcinoma

✓ of bladder, etc.; yet, with the exception of two injections of sodium iodide, that helped to dissipate the sarcoma of left elbow but had no effect on the growth in bladder, the only remedy used in these diverse afflictions was the acid mineral solution, given at first both intravenously and by mouth, and now but once or twice daily with his meals. Still this man improves; in spite of advanced age, he goes out and works in his garden.

✓ We think this point has been made: That degeneration of tissues, under many names and aspects, in many sites and organs, is, in reality, but one disease—lymph stasis. How and why hydrochloric acid, with or without potassium or other mineral salts, alleviates this stasis, with illustrative cases, must be left for other chapters to explain.

Swelling of tissues, as from trauma, fractures, burns or other injuries, or from venom of snakes, or by septic invasion, is but an aspect of a lymph stasis, and should be treated as such.



## CHAPTER XIII

### LYMPH STASIS FROM SEPTIC INFECTION

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In the previous chapters we have visualized how the lymph channels become blocked by a chemical unbalance, how aluminum, iron or the urate salts, are precipitated, causing various phenomena and clinical symptoms. We have described how, as in corn production with a potassium deficiency in soil, rotting fungi or molds appear; so in man, iron deposits and lack of potassium in tissues may be the underlying factor of the varied fungous infections, probably cancer itself. Yet we have still to consider the reactions set up by infections of various forms by microbic invasion.

With but few exceptions, the inflammatory process is not due to the stoppage of the lymph channels by the bodies of these various invading germs, but rather to the toxins generated by them. It is also rare to find a pure culture of any infectious microbe but much more common to find, instead, a mixed infection.

The lowly Nazarene once said that when a devil entereth into a man he invites other devils worse than himself, to enter also. This is particularly true of infective germs, as for instance in gonorrhea, scarlet fever, tuberculosis, etc.; and these added infections are oftentimes worse than the first invading germs. In fact, the ordinary germs found in infectious diseases are usually described as the scavenger microbes, and appear in the sites of injuries, bruises and infected tissues.

We shall think, however, of these inflammatory lesions, not as collections of germ life, although it is quite correct so to do, but rather as the result of an allergic reaction to the toxins generated by the infectious organisms. They are nature's reaction and chemical changes in her struggle to destroy the infective process. They are the two life forces in manifestation, destruction and construction, the germ life endeavoring to propagate at the cost of death to the host; the host endeavoring to destroy the infection and its toxins to preserve its own life. ✓

It is not the purpose of this book to enter into discussion of immunology, nor into the subtle question of vaccines, anti-toxins or antibodies, but rather to consider the rule of hydrochloric acid in the war against microbic invasion. Infections are common, also most disastrous in persons who have the condition known as hypochlorhydria, or a diminution of hydrochloric acid in the gastric fluid. We shall take up this question again more fully when we consider the curative action and biochemical properties of this acid. Before resolution or recovery from septic lymph blockage can be attained, destruction of the allergic reaction must take place. The presence of hydrochloric acid in the tissues brings about this result; whether by stimulation of the formation of this normal acid in the stomach by use of tonics, or by the ingestion of the acid itself, or by the introduction of the dilute acid directly into vein or muscles, the result is the same; allergic action is controlled and neutralized.

So far guanidine has been isolated and found to be the most poisonous of the toxins in animal bodies. It is closely allied to urea and to carbonic acid, and is the product of the chemical breakdown of nitrogenous products in the body. This substance, when injected into animals in small amounts, produces a marked elevation in blood pressure, while larger amounts produce convulsions and death. Again, if we add methyl guanidine a small amount of acetic acid, we get the formation of creatine, a substance which is not a poison, but a food product necessary for life.

Is it any wonder, then, that when diluted hydrochloric acid is put into the circulation, such marvelous results as have been recorded appear? There is produced: Destruction of allergic reactions, of toxins, consequent reopening of blocked lymph channels, followed by drainage of congested areas, both large and microscopic; nutrition reestablished, and phagocytosis set up; and the constructive powers again reestablished on the seat of life. The case of a man treated two years ago comes into mind as this is written; a young man who had been shot in gluteal crease and bullet extracted three weeks before, six miles away in the country, was carried in a truck to our office. We still can see him as he crawled on hands and knees into the house, his left buttock projecting at least six inches be-

yond his right. Laid on operating table, a hard massive swelling was seen, at no place was a pointing or softening discovered. High fever and much pain was present.

Six ounces of a two per cent. solution of hydrochloric acid was given him in a bottle, and he was told to take a teaspoonful in a tumbler of water every two hours. With bottle in hand he crawled out to the waiting truck; no other treatment was given to him. What happened? Eight days later he returned and walked into the office in perfect health.

This is his story: "That lemonade you gave me was great stuff; that first night I slept for first time in three weeks; two days later it busted (meaning the abscess) and two quarts run out of me and now I am well." He was, for examination showed complete repair.

Another illustration of how hydrochloric acid causes increased metabolism occurred at same time. A man was operated upon for a chronic diseased appendix; after three weeks he failed to show the least sign of healing. The wound, although aseptic, failed to heal. Five days later, after administration of hydrochloric acid by mouth, complete repair of wound had taken place.

In septicæmia, hydrochloric acid is most valuable. Case after case of septic invasion, through cuts or other injuries, has been treated not only by the author, but also reported by many other physicians, who unanimously tell of its powers to overcome infections when injected into the circulation. By the use of hydrochloric acid, or better, combined with potassium salts, such septic infections no longer are to be feared. Child bed fever or puerperal sepsis has been successfully treated by hydrochloric acid solution all over the world. In far off India brilliant results have been reported of cases, seemingly hopeless, that have miraculously recovered after this acid—usually one part to one thousand—had been administered. If this specific hydrochloric acid could be used early after child birth, or even before, as it is harmless, the death rate following child birth would fall almost to zero point.

The administration of hydrochloric acid does not prevent the use of vaccines or any other indicated treatment, but, instead, augments their action. Locally, for instance, a one per cent. solution of hydrochloric acid may be applied as a

compress. It is helpful, as Dr. de Beszedits has proven, injected around snake bites and scorpion stings. On septic wounds, after injecting the acid mineral solution intravenously, the author applies mineral oil containing iodine and naphthaline. Dr. de Beszedits, in the wild places of Mexico, states that this antiseptic oil is specific for erysipelas. It is also valuable for local treatment of arthritis and all septic infections.

Further consideration of this old, yet strikingly new, remedy must be left for another chapter. The points which the writer wishes here to establish are: That this acid, normal to the body, is nature's weapon to destroy body toxins, to neutralize poisons, to keep in perfect balance the pH of the tissues, to desensitize allergic reactions no matter what their origin, whether from within or without, and to open congested lymphatic spaces, blocked by the secretions and excretions of disease reactions. In short, hydrochloric acid is nature's own weapon in its fight against the destructive powers of the creative emanation.

## CHAPTER XIV

### ASTHMA

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This volume would not be complete unless asthma, hay fever and bronchial affections were carefully considered under the light of the acid mineral hypothesis, for it was in this field that hydrochloric acid first won its claim to be considered a most reliable and effective remedy.

It was at the Dunn Memorial Clinic, following Burr Ferguson's startling results and claims, that Charles DeWitt Colby (Ashville, N. C.) gave the hydrochloric acid solution the acid test. Eighteen advanced cases of asthma and tuberculosis, many hopeless and doomed to death, were treated with hydrochloric acid. These patients had failed to improve by any other previous treatment. "The technique of injection consisted" of the introduction into a vein of a solution of one part of chemically pure hydrochloric acid to 1500 parts of triple distilled water, with a beginning dose of two to three cc. continuing up to 10 cc. every second day to one week.

The hydrochloric acid solutions were used at first in very weak dosage. Granville S. Hanes, if not the first, one of those who first advocated the injection of this acid locally in pruritus ani, used one part to 3000 with novocaine. Recent reports by Burr Ferguson show that one part in 250 is not only harmless but very effective. As one considers the pH balance of life, 7.30 approximately, it is natural to fear that by the injection of the hydrochloric acid directly into the blood stream, hemolysis of the blood may occur and, by lowering of the pH reaction, death must ensue. But like many other conclusions minus experimentation, the cries from medical leaders were but foolish and uncalled for.

Hydrochloric acid is secreted by the gastric acid mucosa and continually absorbed by the lymph stream through the intestinal walls, as later described. Nature has, therefore, adjusted the organism to take care of this acid solution.

We can but briefly note Dr. Colby's summary of cases and the results obtained: (1) Leucocytosis and phagocytosis were



produced in the cases of advanced pulmonary tuberculosis, which were complicated by suppurative processes, by means of intravenous injections of hydrochloric acid, with surprising improvement in certain apparently hopeless cases. (2) In Germany, England and America there are investigators who believe that allergy is an alkalosis, and that the oral administration of hydrochloric acid and other acids is beneficial. (3) In eighteen cases of asthma, hay fever, acne, sinusitis, and epilepsy treated by hydrochloric acid injections there was an improvement in all, with what appears to be a cure in four, and possibly, after a longer period of observation, in several more. (4) Whatever the chemical or cellular reaction involved, the results so far seem to justify further trial, and the procedure, with strict technique, is harmless. (Reported, February, 1932—Tri-State Medical Association, Raleigh, N. C.)

Some authorities look upon all disease symptoms as manifestations of allergic reactions, but simply to state that urticaria, coryza or asthmatic attacks are caused by a protein poisoning, fails to visualize just what has occurred in the mucous membranes. As, for instance, when a person suddenly awakens with the condition of difficult respiration, which we term asthma, or, following an exposure to cold, develops a swollen nasal mucosa, commonly termed a "cold in the head" or an attack of bronchitis, cough and, later, expectoration of bronchial secretions, what has really caused these symptoms? We need to look beyond these symptoms to an underlying condition present if we would know how hydrochloric acid relieves or prevents these common maladies. Much time and money have been spent investigating the common colds or coryzas. Vaccines and serums have failed to relieve; also pollen extracts in hay fever victims. Why? What is asthma? What is coryza? What is allergy? We know these patients develop swollen mucous membranes in the nose or bronchial tubes, for the turgid, swollen membranes are congested, the air passages more or less blocked, and respiration made difficult. Later, resolution, so called, appears, these swollen membranes pour out lymph or serous fluid containing bacterial organisms and the protecting phagocytes.

A moment's reflection and meditation thereon would tell us that these swollen, infected membranes were not blocked by

a stasis of the blood stream, for that form of blockage would cause a thrombus and, later, gangrene to appear, but it is rather a stasis of lymph channels. The chill or protein allergy has disturbed the vaso motor or lymph nerve control in the afferent lymph channels. They become blocked, and, as Dr. Handley has so well described, the lymph pressure, owing to this stasis, gradually rises equal to the blood pressure in the arterial capillaries.

When the lymph vessels re-open, either by nature herself, or through the administration of adrenalin, or by the effects of remedies that relieve congestion, such as atropine or belladonna, hyoscine, camphor, quinine, etc., relief ensues.

During this static congestion, toxins from impaired metabolism accumulate, the oxygen content is diminished, the pH reaction has changed and the ever present microorganisms proliferate. If stasis be prolonged, as, for instance, in sinusitis, pus accumulates and must be expelled before recovery is complete.

The above described condition needs to be differentiated from a stasis of the lymph channels that drain the tissues, present in heart failure, nephritis, etc. Here the negative pressure is lowered and the lymph fluids accumulate, as in ascites, anasarca and edema of the lungs. If adrenalin be administered in such cases grave symptoms from its injection may occur.

How and why does hydrochloric acid relieve hay fever, asthma, etc? There are several reasons. First, a deficiency of gastric hydrochloric acid secretion is very common, especially so in city dwellers; in such people there is an underlying alkalosis (the writer terms it "a basic alkalosis"). This condition causes, or predisposes, the person to become sensitized not only to foreign proteins, but also to changes of temperature—in short, subject to colds. Second, this same basic alkalosis has a deficiency of chloric ions in the body fluids; therefore, immunity against septic infection is reduced. Third, an increase of the normal pH reaction creates conditions favorable to microbic life. Fourth, basic alkalosis causes a retention of toxins and waste toxic acids. Fifth, lowered vitality of cellular life.

When hydrochloric acid is injected into the blood stream

or, as we shall describe later, taken by mouth, it enters the lymphatic vessels, breaks down the retained toxins present, helps to eliminate lactic, carbonic and other acids, lowers the pH reaction in the congested tissues, destroys the favorable medium for microbic life, relieves the congestion of tissues by reopening the lymphatic vessels, glands and spaces, and sets up an active phagocytosis.

The writer, in addition to this testimony, describes a few selected cases of asthma to add his evidence—although not needed—to that of DeWitt Colby, Ferguson, and many others who have had such striking curative results with the use of hydrochloric acid by vein in cases of septic tuberculosis, asthma, bronchitis, hay fever, urticaria and other skin infections.

Before taking up these cases in detail an important difference should be mentioned. All the cases of Ferguson and Colby were treated by intravenous injections of weak hydrochloric acid. Is it possible to get the same results by oral administration? The writer has already pointed out that oral, or even intravenous, administration of hydrochloric acid does not restore to the gastric mucosa the power to increase its acid secretion any more than does the injection of insulin increase its secretion in the pancreatic glands.

The object of all therapeutic treatment, after immediate relief has been given, such as injections of adrenalin in acute asthma, is to bring back to normal the functions of the body. Giving hydrochloric acid solution by vein may, in some cases, be sufficient. If, however, the secretion of gastric hydrochloric acid be seriously diminished, the intravenous injection or acid administration will be found—although most helpful—inadequate. Again, there are many persons who lack available veins, are too young, or who live in far off places where intravenous injections are impossible.

The author gives dilute hydrochloric acid by mouth but with it, potassium salts, and, by so doing, he has repeatedly proven that intravenous injections can be entirely dispensed with, in many cases. He believes that potassium salts restore the gastric acid cells to their normal output of acid, strengthen strained hearts, and lower appreciably the pH reaction of the blood and lymph. This method simplifies the treatment and helps the patient to become permanently relieved.

To what extent allergy is dependent upon the activity of the adrenals is still a debatable question. We know that some persons can inhale ragweed pollen with no discomfort; why the difference between the hay fever victim and the immune? Dr. William V. P. Garretson states emphatically: "It is axiomatic that the person who has the normal amount of adrenalin in the circulatory blood never has any of the symptoms of allergy, or anaphylaxis." Again he states: "It has been observed that certain individuals, upon inhaling or ingesting certain proteins, react by developing symptoms referable to all or any organ of the body. Some react by respiratory symptoms, i. e., sneezing attacks, so called hay fever, rose cold, vasomotor rhinitis, etc., and others by asthmatic attacks. Many have gastrointestinal symptoms (gastric and duodenal ulcer, pyloro spasm and colitis), while many others develop skin manifestations, i. e., hives, angioneurotic edema, eczema and other so called neurogenic dermatoses. Localized meningeal edema of the brain and spinal cord produces transient conditions, characterized by definite neurological symptoms, which frequently baffle and mislead the examining physician in differentiating functional from organic symptoms in the domain of neurology. Arthritic symptoms, single or multiple, vagabond or transient in type, with or without edema or serous exudate in the joints, and with negative radiographic evidence, are a common allergic reaction." "Every individual deficient in adrenalin is the victim of vagotonia." "Allergic phenomena are dependent upon the existence of adrenalin deficiency."—*Medical Record*, 1935.

The above emphatic statements linking allergy with a suprarenal deficiency, also to vagotonia—that is, atony of the vagus nerve—is well worth studying. As Colby and Burr Ferguson have proved the value of hydrochloric acid solution in asthma, it is possibly true that this acid may be the specific for a host of varied allergic phenomena as so well described by Dr. Garretson. The therapy of the mineral acid solution is but in its infancy, and it may yet prove to be the key to the treatment of many hitherto intractable diseases.

For the treatment of bronchitis, acute and chronic, this acid is quite effective; also for septic conditions of the respiratory tract, including the accessory bony cavities of the nasal organs.



To add to the long list of cases of asthma so successfully treated by DeWitt Colby, Ferguson, and many others by hydrochloric acid intravenous injections would be futile. The claim by the writer—that the hydrochloric acid potassium solution, given orally, can obviate the necessity for intravenous therapy—is left only to be considered. The best therapy is that which causes such changes in the metabolism as to make the organism cure itself, as it were. This acid potassium solution, when given to asthmatic patients, increases the activity of the acid glands in the gastric mucosa. This being the case, we should expect it to alleviate or cure such conditions that are set up by its deficiency. Is this true of asthma? The two following cases are quoted briefly to show this curative action.

Case of P. P. Married woman 62 years of age. Asthmatic attacks at intervals for fifteen years. All treatment, except to relieve distress, futile. When seen November, 1934, had been in distress for eight hours. She was given 8 drops in water every half hour; relief was experienced in two hours. The remedy was then given six times daily. Later three times daily for one month longer. April 19, 1935, no recurrence and health much improved.

J. F. Boy seven years old. February, 1935: Acute asthma, second attack. A small dose of adrenalin was injected. Nine drops of the acid mineral solution given four times daily. The boy has had influenza and colds, but asthma did not reappear. No recurrence to date—April, 1935.

Ten other cases similar to above were treated, with same results, without the use of intravenous injections of hydrochloric acid or adrenalin solutions.

To desensitize hay fever victims by pollen extracts without, at the same time, increasing the action of the endocrine glands, lowering the pH reaction of body tissues to the normal value, changing a hypochlorhydria to the normal hydrochloric acid value, must be of little avail. Ofttimes it will be found that increasing the hydrochloric acid gastric secretion is all that is necessary, especially in allergic conditions caused by proteins in the food of the patient.

In acute coryzas, or hay fever, a rhinitis tablet containing Camphor gr.  $\frac{1}{2}$ , Fl. ext. Belladonna mi. 2, Quinine Sulphate



gr  $\frac{1}{2}$ , aids in relieving the congested nasal membranes. This remedy can be given in conjunction with an aspirin tablet or the migraine tablet mentioned in chapter on calcium therapy. These remedies will give needed relief, while the acid mineral solution is modifying the increased pH value of tissues, and increasing the activity of the suprarenal glands.

## CHAPTER XV

### DIABETES MELLITUS

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Diabetes Mellitus is a disturbance of metabolism, caused chiefly by deficiency in insulin secretion from the pancreas and chiefly characterized by hyperglycemia and glycosuria.

Before taking into consideration the therapeutic action of our acid mineral therapy, in this common and apparently increasing disease, it seems best first of all briefly to review the present knowledge of normal gastric and intestinal digestion of the food intake, also the chemical changes that take place before the food is absorbed; then follow the chemical reactions and changes set up by the enzymes or catalysts from the endocrine glands until the food products are used and finally eliminated from the tissues.

We shall thus be better able to understand the changes that have taken place in a diabetic digestion and realize, even if but only to a slight degree, the action and value of the hydrochloric acid and potassium solution in the disturbed metabolism present in this disease.

In a normal stomach after intake of food the gastric juice is excreted from the acid and peptic cells of the gastric mucosa. This juice contains, in addition to pepsin and mucus, hydrochloric acid. The strength of this acid content is generally accepted as being about three parts to one thousand. Professor Hawk, previously quoted, has found acid values as high as four to five parts to one thousand, but states that as soon as this degree of acidity is present a regurgitation of duodenal contents takes place, which increases the pH reaction and inhibits the secretion of this acid.

Before going further we can see by the light of Professor Hawk's statement that a tonic spasm of the pyloric valve, perchance set up by sores or ulcers nearby, by obstructing this regurgitation, may easily cause a hyperchlorhydria, or an excess of hydrochloric acid with its accompanying symptoms.

Another interesting phenomenon previously mentioned is that the flow of the gastric contents while gastric digestion

goes forward, is stopped for a while. During this period the hydrochloric acid accumulates in the stomach and a temporary alkalosis is set up as demonstrated by an alkaline reaction of the urine, voided early after eating. If a complete stoppage occurs near the duodenum the acute condition known as alkalosis takes place, and if we can visualize that this acid cannot escape into the intestinal tract and is shut off from the body by the pyloric valve, we can readily understand what is meant by this acute alkalosis.

But the condition must not be confused in the reader's mind with that form of alkalosis present in cancer; and we shall show it present in many other diseases both acute and chronic. This form of alkalosis is caused by a deficiency of hydrochloric acid secretion and is termed hypochlorhydria; when completely absent it is termed achlorhydria.

As digestion goes forward the stomach contents are carried onward to the pyloric valve; when acceptable, it opens and a portion of the gastric contents is passed into the duodenum. If unacceptable, it may refuse egress and an acute dilatation of stomach with accumulating gas may cause death.

During this digestive process the ptyalin of the saliva is slowly destroyed; the hydrochloric acid slowly sterilizes the food, destroys lactic and other acids present, and the pepsin plays its part on the protein substances. As the food goes through the pylorus, the alkaline tide ceases and the lymph and urine again regain their normal pH reaction.

In *Practical Physiological Chemistry*, by Hawk & Bergeim, we find this explanation:

"The hydrochloric acid of the gastric juice forms a medium in which the pepsin can most satisfactorily digest the protein food, and at the same time it acts as an antiseptic or germicide which prevents putrefactive processes in the stomach. It also possesses slight power of inverting cane sugar, this property being due to the hydrogen ion. When the hydrochloric acid of the gastric juice is diminished in quantity (hypoacidity) or absent, as it may be in many cases of functional or organic disease, there is no check to the growth of microorganisms in the stomach. There are, however, certain of the more resistant spores which even the normal acidity of the gastric juice will not destroy. A condition of hypoacidity may also

give rise to fermentation with the formation of comparatively large amounts of such substances as lactic acid and butyric acid."

Biochemists hitherto have overlooked or ignored the fact that the hydrochloric acid penetrates through the intestinal mucosa, stimulating the production of a hormone termed "secretin" which, entering into the circulation of the blood or lymph activates the special pancreatic glands to produce their specific hormone, insulin; so it is safe to claim that no secretin formed means little or no insulin production; hence, hyperglycemia and then glycosuria appears. In deficiency of insulin Professor Hawk states:

"It has been demonstrated that acetoacetic acid may be formed in the body through the oxidation of butyric acid, and that the administration of fats containing butyric to diabetics causes an increased production of acetoacetic acid. Furthermore, it is believed that fatty acids higher than butyric acid in the series also yield acetoacetic acid by oxidation. In this change the oxidation occurs at the B-carbon, two carbon atoms at a time being involved. As soon as the oxidation proceeds to the butyric stage this acid is transformed into acetoacetic acid. In diabetes the body either does not possess the normal power of oxidizing acetoacetic acid or else this acid is produced in excessive amount. At any rate, we find it in blood and urine in abnormal quantity."

Therefore, in cases of increased blood sugar we should discover a deficiency of hydrochloric acid in the gastric secretion in all cases of true diabetes mellitus, and we shall later see that the administration of the acid mineral solution by vein and by mouth is most satisfactory and helpful in such patients.

The insulin treatment is invaluable in cases of acute diabetes in young children, in diabetic coma and in surgical cases that have marked hyperglycemia. The writer, however, makes these claims, which he has proven to his own satisfaction to be true: (1) That an increase of glucose in the blood stream is not harmful, as glucose is a normal constituent of the blood; (2) that the retention of lactic acid and carbonic acid, which but means a failure to eliminate carbon dioxide through

the respiratory system, is due to the need of hydrochloric acid to keep the pH reaction in balance; (3) that when the hydrochloric acid content of the gastric fluid is restored an acidosis, that is, retention of lactic acid and carbonic acid, does not occur; (4) that the normal gastric acid destroys the diacetic and butyric acids present in the acidosis of diabetes caused by failure to properly assimilate proteins and fats; (5) that hypochlorhydria causes a deficiency of the secretin hormone secreted by the intestinal mucosa; (6) that deficiency of the secretin hormone causes a deficiency of insulin production; (7) that a hypochlorhydria causes an alkalosis of the lymph stream and inactivates or causes a decomposition of the insulin secreted, possibly within the insulin cells or islets of Langerhans. We have already quoted an unquestioned authority that the insulin hormone decomposes in a neutral solution, breaks down rapidly in an alkaline, but is kept and sold in an acid solution of hydrochloric acid.

Whether the lymph stream, during the absorption of food through the upper portion of the small intestines, that flows through the pancreas and liver is more acid than when digestion has ceased, must be left for biochemical physiologists to determine.

Another phase of the acid gastric secretion, although not particularly involved in diabetes mellitus, is that concerning its action in the excretion of bile from liver and gall bladder.

Many senile patients have diseased gall bladder and bile ducts. The sterilizing action of the free chlorine must aid in protecting the bile organs from septic invasions; a deficiency of hydrochloric acid must predispose not only to septic cholecystitis, but also to stagnation of the bile and formation of calculi in gall bladder.

Chlorine has qualities similar to oxygen, and combustion can take place in its presence even if oxygen is absent. To understand gastric digestion we must not think of an oxidation but rather of a chlorine combustion. Hydrochloric acid gives off free chlorine that rapidly unites with sodium, phosphorus, potassium and iron, forming chlorides, giving off free hydrogen ions necessary for creation of this acid in the gastric cells. At present just how this acid is formed in the cells is not fully understood; but it is evident that a deficiency must give rise to



conditions favorable to septic diseases, to mal-digestion and mal-assimilation of the minerals in food and to progressive alkalosis, with all the concomitant symptoms and results previously described.

Again Professor Hawk states: "The question of the origin of the hydrochloric acid in the gastric juice is a problem that many investigators have given much attention. Many theories have been proposed, among them the interaction of sodium chloride with carbonic acid, with phosphate or with organic acids . . . That the hydrochloric acid arises from the chlorides of the blood appears to be well established but the same cannot be said with regard to the immediate or ultimate origin of the hydrogen ions involved in the reaction."

The pathology of diabetes tells of atrophy and degeneration of the cells, cirrhosis, and induration of the pancreas, but also other organs become degenerated in this disease. Kidneys, too, have sclerotic and fatty degeneration; also capillaries in extremities that may go on to gangrene. Diabetic cataract of the eyes is common; also ferunculosis, and obesity.

Can we not see under these varied aspects the one underlying condition, a lymph stasis? That before degeneration appears in cellular life, nutrition must, necessarily, be impaired and toxins retained; and that this degeneration, affecting particularly the insulin cells of the pancreas, is but a localized general disease that may appear in other persons, such as cancer, arteriosclerosis, angina pectoris, etc.

In ordinary cases of diabetes mellitus, cases that have not been overdosed with insulin, the administration of the acid mineral solution by vein and mouth, or at times by mouth alone, is completely satisfactory, and if kept up, will in time cause complete relief from all symptoms, so that treatment may be stopped.

This method of treatment, so different from present day therapy, that calls for use of insulin more or less continuously during the remainder of life, is practical and scientific. For instance, if a case of achlorhydria is treated by the present system of therapy, he is given fairly large doses of dilute hydrochloric acid after meals. Such treatment does not restore the acid function and the patient becomes tired of his sour drink. If we do not use our muscles they become weak and

atrophy; likewise, if the stomach is supplied with this acid it will fail to create its own. So with insulin, its continued use, must but cause an increased degeneration of the specific pancreatic cells. ✓

The author does not use insulin except in coma, and this is not met with in his diabetic cases. However, if patients are taking insulin they are instructed to lower the dosage and to watch daily by the Benedict test in order that a state of hypoglycemia may not develop. Cases of gangrene appearing in toes are at once put on the acid mineral treatment by mouth ✓ six times daily, by vein once or twice weekly; although, if necessary, the intravenous injections can be given twice daily. Cases seen with purplish toes or feet should be treated with iodonaphthaline oil, formula of which is given later. In every case treated by the acid mineral solution excessive thirst and ✓ appetite disappear within a few days, the amount of urine drops to normal, the specific gravity slowly begins to fall; all signs of acidosis disappear.

At least three months is necessary to make patient sugar free. If kidneys are badly damaged, glycosuria may be always found. Let us repeat again, it is not the sugar or glucose in the blood that causes harm, injury and degeneration; but instead, the retention of and failure to break down and eliminate the waste products of metabolism. If the normal hydrochloric acid secretion is restored these waste products and toxins are normally eliminated.

Why does the acid mineral solution, containing only about two and one-half per cent. hydrochloric acid succeed, ✓ when the ten per cent. official dilute hydrochloric acid inevitably fails? It is because of its potassium salt content. ✓ Let us see why. We know that the chlorine in the gastric acid is derived from the chlorides in the blood and lymph. There may be an absence of the acid in the stomach even though there may be a normal sodium chloride content in the blood. There may be, however, a potassium deficiency. All have noticed elderly people with hanging, soft, flabby tissues, and ✓ also sickly children, tired, undernourished and fretful.

It is these cases that have a potassium deficiency; when this deficiency is corrected new energy and vitality appear. So it is in patients with glycosuria, not alone in the production of

an increased normal acid gastric secretion, but in heart and other tissues of the body, for potassium is essential to life.

Unfortunately, chemistry has not brought forward a simple test for this metal in cases of disease. We can but call attention to this probable deficiency and its symptoms and tell the results of its administration. Dr. de Beszedits of Guerrero, Mexico, has in the columns of the *Medical World* described how its administration to undernourished children promoted health, nutrition and life. Given to cases of diabetes mellitus, most gratifying results are obtained. In the agricultural world an increase of over two hundred per cent. in food production has been reported by its application to the soil.

A typical case is as follows: R. B. (male), weight 190 lbs. (Wife has carcinoma of digestive tract). Complained of thirst and would drink one quart of water frequently day or night; polyuria. Examination, body well nourished; overweight; urine specific gravity of 1.40; sugar content high. He was advised to leave off sugar, rice, grits and white bread. As he had laborious work, his diet was not cut greatly. Injections of our acid mineral solution were given every five days; also twenty-five drops in water four times daily. Eight days later he reported he was no longer thirsty; specific gravity, 1.020. He gradually improved and in one month, although not sugar free, he considered himself well.

Another case of four years ago, a man sixty-two years of age had diabetes for six years; also an epithelioma on neck. The same treatment was given. Later he had the cancer (size of a silver dollar) removed by a caustic paste. He then resumed his treatment. By the end of four months he was sugar free, and in good health. At this date he is still well and has had no recurrence of the cancerous growth. Many other cases equally satisfactory have been treated.

An interesting report was made by a physician in Texas who is getting similar results, that when the potassium salts were omitted from the acid mineral solution, glycosuria reappeared.

A woman in Maryland, of middle age, two years ago reported to the author that she had had diabetes for four years, following an injection of glucose at Johns Hopkins Hospital

for varicosed veins of her legs. She had been taking insulin daily and was on a strict diet. She seemed well nourished, but complained of muscular spasms both night and day for past four days.

It was evident that the calcium content of her blood and probable failure of the parathyroid glands to function properly were at fault; but it might be a question not of calcium deficiency but rather of calcium availability. The acid mineral solution alone was prescribed six times daily. Relief of muscular twitchings soon occurred; also the glucose in urine was greatly diminished.

The writer strongly condemns home treatment of this disease. In many diabetic patients the kidneys are damaged and, even if the amount of blood sugar is normal, the kidneys may fail to retain it; in such cases insulin is dangerous. Also he condemns a starvation diet, having seen patients starving and emaciated making a daily Benedict's test, and in a neurotic condition over the least trace of sugar.

As the sugar in blood is derived not alone from carbohydrates but also from proteins and fats, the only restrictions the writer makes are, reduction of sugar and carbohydrates, such as sugar, white bread, rice, beans, and also eggs. These mild restrictions with the use of the acid mineral solution are usually all that are required.

In closing, the writer has no desire to minimize in any way the splendid work of Doctors Banting and Best, who first made insulin available and proved its extreme value in diabetic coma and in surgical operations on diabetic patients. This discovery opened a new vista for further investigation and discovery. When the basic alkalosis is understood, such an understanding may help to eradicate, also to prevent, the onset of this common disease.



## CHAPTER XVI

### TUBERCULOSIS

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Scarcely more than fifty years have passed since Robert Koch by long research and experimentation with aniline dyes, discovered and later proved beyond doubt that the cause of tuberculosis is a bacillus that could be identified, cultured, injected into various animals, causing their death by tuberculosis disease, refound, recultured and so on until all doubt of its identification and role was impossible.

But all attempts to manufacture a vaccine that would immunize animals or man against its invasion, were and are still futile and disastrous. A progressive infection like tuberculosis or syphilis, that produces no immunity, that has no limitations to its progress, that sensitizes the tissues of the host, and makes them still more liable to further infection by the invading germs, can never be controlled by serums or cultures of killed bacilli.

Although tuberculosis in its manifold varieties is seemingly decreasing, this decrease is not due primarily to any known method or treatment or medicine, rather to a higher standard of living and of diet; in spite of slum dwellings in our larger cities, the slums of today are far superior to those of fifty years ago. In the writer's opinion, the chief cause of this decline in death rates from tuberculosis is due to purification and sterilization of the milk supply; also to control of this disease in milk-producing animals.

Yet in spite of these measures tuberculosis is still unconquered; still there are huge sanatoria with beds filled with emaciated victims hoping week after week, month after month, for recovery; still thousands die of this dire disease yearly all over the world, from arctic ice to tropical jungle; and so far, no specific remedy against its ravages has been found or, if discovered, is not generally known.

Tuberculosis, syphilis, pneumonia, influenza and other non-immunizing diseases, seem to be the group that is particularly the field for hydrochloric acid and mineral salts therapy.



The study of tuberculosis from a chemical standpoint by Professor Esmond R. Long is of great value, for he has laid bare the most vulnerable points of attack, and repeated cases of tuberculosis, whether it be of lungs, bones or brain, have proven the correctness of his claims, as well as the undeniable results of the acid mineral treatment; for every case, young and old, responded quickly to this remedy.

Professor Long has shown that tubercle bacilli, whether in or out of the body, demand a certain form of food for sustenance and growth, and that this is chiefly glycerol, commonly known as glycerine. He writes that "Glycerol is always present in the human body. Body fat contains five per cent., but only potentially and not immediately available. The availability of free glycerol in the tissues accounts for some of the differences in people in susceptibility to tuberculosis." As it is well known that fats, in an alkaline medium and also in the presence of steam, give off this substance, we may readily visualize how a temperature, as in fever, and an alkaline reaction of human tissues may hasten, if not cause, this breaking down of the fatty acids so as to liberate glycerol in appreciable amounts. ✓

Another factor, however, must be recognized before we attempt to explain the curative action of the acid mineral solution. Professor Long further states that "tuberculosis is one of those diseases in which the patient becomes sensitized to the cause of disease, in this instance, the tubercle bacillus." This really means that when this disease is present in the organism, its protein poisons cause tissues or organs other than the part diseased, to become inflamed and otherwise prepared for lodgment of the invading bacilli. A case now under treatment gave a very good example of this phenomenon. A young woman losing weight, tired, with slight cough, complained of bimonthly menstrual periods. Examination showed no lesion perceptible in pelvis, but instead an active congestion at apex of her right lung. As soon, however, as she received her first injection of the acid mineral solution into veins, also by mouth, this menstrual disorder disappeared. After the fourth weekly injection the apex cleared up, cough ceased and soon all signs of the disease will have disappeared.

Why is this so? To the writer it seems so simple, for does not this normal hydrochloric acid with its minerals desensitize, does not the chlorine sterilize, does not this solution destroy alkalosis? This is why results are so prompt and so uniform. No longer need these victims lie for months in beds, no longer need tired-out people fret or worry over loss of weight, loss of income or loss of friends—for this treatment is no longer the art of medicine, but its science.

It is not the purpose of the author to relate and describe case after case, for this would be indeed egotistical and wearisome. What the medical world needs is knowledge, the why and wherefore, so that all may understand and surge forward to wipe out this disease from the human race. Nearby lives a little eight-year-old girl with golden hair, who a year and a half ago came from West Palm Beach to live in this little city. She had coughed night and day for nearly two years, both asleep and awake. Her family history was tuberculous for three generations back. Before any treatment was ordered she was X-rayed at a nearby hospital, and the film showed lesions throughout the lungs and interspaces, and the case appeared absolutely hopeless. The parents were told that the usual treatment of bed and forced diet would be of no avail, in view of the large area involved. Therefore it was not advised. "Keep her from school, feed her what she can eat freely, let her run about all she wishes; also give her this solution six times daily."

What happened? Within twenty-four hours the fever subsided. Cough gradually lessened and in four months all signs of ill health have vanished. The child has gained sixteen pounds in weight, and a recent film taken shows many calcifying areas in lungs. Also mother and grandfather of this child who, too, had tuberculosis, have been brought back to normal health by this same solution.

A most interesting case was discovered during our vacation in New Hampshire in the summer of 1933. A little girl, three years old on a nearby farm, the youngest of four children had for two years slowly increasing convulsions until in 1933 they numbered from three to twenty-three attacks daily. She had been treated by physicians of the nearby towns to no avail. After a sojourn in a hospital in Rochester, New

Hampshire, she was sent to the Boston Children's Hospital for observation. After about two months' treatment this child was sent home, case undiagnosed, and unrelieved of the affliction, and although taking phenobarbital in large doses, she had three convulsions on her journey home.

The following day the author went down to the farm to see this child. She was up and running about. A history of a dry cough and constipation was given, but it was noticed that her body and head were bent to one side as she ran about the room. Presently a convulsion took place. She did not struggle but closed her eyes and became unconscious for a short while. What could be the cause? As phenobarbital had failed to relieve, it could not be a true epilepsy. The peculiar posture of her body indicated a unilateral excessive pressure in brain, the cough and persistent constipation pointed to an incipient tuberculosis. This disease in children usually arises from infection of the intestinal lymphatic glands.

The acid mineral solution was prescribed—six drops six times daily. Within twenty-four hours the convulsions ceased. They occurred in single attacks about once a week for a while. Within six weeks they ceased entirely. Today, two years later, this child is well, bright and strong. The diagnosis of tuberculosis was not proven but assumed. We did recognize, however, that the posture and convulsions were caused by a blocking of the lymph channels in the cranial cavity. The hydrochloric acid solution, as demonstrated over and over again, breaks down toxins in the circulation. This detoxification relieves the congestion of lymph vessels and, in this case, restored the normal flow of lymph in the cranial cavity.

Another happy result of this therapy is the permanence of recovery; cases remain cured; seen a year or more after treatment they say, "I am all right, there's nothing the matter with me." The following case in that respect is most interesting: A man aged twenty-six years, had been sick with pulmonary tuberculosis for four years. Previous to coming here for treatment, he had been kept in bed for ten months at a sanatorium for tuberculosis in Augusta, Georgia. Examination showed both apexes of lungs involved; also base of right lung, heart and pylorus of stomach infected, plus severe cough,

free expectoration, and sharp pains after eating. In addition, a very septic tooth in lower jaw was discovered.

Intravenous injections of hydrochloric acid and potassium solution were given at three to seven day intervals and by mouth four times daily in doses of fifteen drops. Rapid improvement took place; still, at times, fever would return. Finally he was induced to have the septic molar tooth extracted, which caused much local reaction. From that time on recovery was rapid. In our opinion, the digestive disturbance was due to this septic tooth; also drainage into the lymphatics infected the lungs.

This man, seen one year later, said, "I am all right, I am well." Later his father and sister in Georgia, both infected with tuberculosis, came in for treatment.

Another case, also far advanced with general tuberculosis, should be included. A woman, sixty-eight years of age, living on the banks of the St. John's River, eighteen miles away, had been sick following an attack of influenza one year before; no treatment had been given her and she was confined to bed. She had a racking cough, both apexes to fifth rib diseased, also an unresolved patch of pneumonic infection was found at base of right lung, caused probably by pneumonia one year before concurrent with the attack of influenza. In addition, her body was covered with a diffuse papular eruption that itched badly; also she had a distressing pruritus of vulva. She was visited but once weekly, at which time an intravenous injection of the acid mineral solution was given. This acid solution was ordered to be taken internally six times daily in doses of eight drops, well diluted. Improvement gradually took place. Within six weeks she was up and is now in fairly good health and able to care for herself. The pneumonic area in base of lung cleared up within seven days. She had no nurse, only colored help, poor food, yet despite many drawbacks she has regained health.

These two cases, one with every attention in a sanitarium, the other with none, show, undisputedly, the correctness of the conclusions of Professor Long, that if the blood sugar can be kept from excess and glycerol formation stopped, the tubercle bacilli will starve and die for want of sustenance; the germicidal action of the free chlorine of the gastric juice is



made available, for the acid is increased by the administration of potassium salts, as before mentioned. This is the crucial distinction between the early method where hydrochloric acid alone, in various solutions from one part in two hundred to one part in fifteen hundred, is injected into veins or muscles. Hydrochloric acid alone will not increase the production of this same acid in the gastric cells; rather, at times, it seems to discourage it. For instance, insulin in constant dosage will eventually inhibit its production in the pancreas, so likewise hydrochloric acid given continuously will produce a dependence upon its intake.

The object of any medical treatment is to restore the normal activity of the cells, not to do for them what they themselves should do. The formula for the acid mineral solution, to be given later, gives hydrochloric acid in a weak solution in order to carry the potassium salts into the circulation, and when the deficiency of this metal is supplied the gastric acid secretion returns to normal.

Other physicians have reported cases of tuberculosis (osteitis) treated successfully with intravenous injections of hydrochloric acid. The following case demonstrates how the potassium salts added to this acid obviates the need of intravenous treatment.

A boy of ten years in this city, pale and emaciated with tubercular infection in bones of both feet, had been treated by specialists, then sent to a hospital in central Florida for several months. On his return home special shoes were made for him; all treatment, however, failed to help him. This boy, after all had been done that was possible in our present day therapeutics, was given the acid mineral solution. Given first combined with milk it had but small effect; when given diluted in water, in a few weeks this boy was restored to health. When last seen he was running about with bare feet, in perfect health.

When comparison is made between the usual methods and this new therapy its true value becomes strikingly manifest, for the cost of this true specific is most nil; while, on the other hand, cost of treatment in sanatoria or far off in wilds of Arizona, away from work, friends and home, is oftentimes beyond the financial ability of the ordinary individual. Only by



actual observation can these claims be accepted; yet, when studied, tested and the patients seen months afterward in perfect health, its wonderful value becomes confirmed beyond all question.

## CHAPTER XVII

### CIRCULATORY DISEASES

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A recognition of the circulation of the lymph stream through its channels within the muscles of the heart and the walls of arteries, veins and minute capillaries is as important in the diagnosis and treatment of circulatory diseases, as is the study of the circulation of the blood.

Unless, as we have so strongly stressed in other chapters, the normal metabolism of the tissues is maintained, grave results, if but slow, must inevitably take place in the circulatory organs and tissues. When the lymph microscopic channels become blocked or obstructed by a deposition of waste salts so readily demonstrated in the deformed joints of fingers of elderly people or in the enlarged knee, for instance, in cases of arthritis, we must also expect these same deposits to take place in other organs or tissues of the body.

Focal infections such as septic teeth, pus pockets in kidney, appendix or gall bladder, produce a lymph stasis causing arthritis, varicose veins and sclerosed arteries. Here again an occult alkalosis is mainly responsible; and a deficiency of the chlorine ions decreases immunity against microbic invasion.

The physician must also bear in mind the possibility of deposits of aluminum and ferrous salts favored by deficiencies of phosphorus and potassium salts in the fluids of the body.

Again let us call to mind how, when corn was grown in soil deficient in phosphorus and potassium, aluminum and iron became deposited in the sap nodes; how molds and rot fungi caused destruction of the roots of these plants and brought disaster to the fields of corn. The root system of the vegetable world has its counterpart in the digestive tract of the animal world. How often cases of gastric acid duodenal ulcers appear, how often appendicitis suddenly attacks the seemingly well patient.

Seemingly, diseases of arteries and heart are increasing in number. Degeneration of the myocardium and arterial

walls appear slowly. The change in the tissues of these organs evidently cannot be caused by lack of blood that rushes through them, but must be due to failure of nutrition and a retention of the waste products of cellular life. Any other explanation is inadequate to explain such degenerative changes.

Only a blocking of the channels that supply the nutrient lymph to cells can be responsible; likewise this hypothetical stasis explains the changes in the kidneys, the sclerosed vessels of the brain preceding hemiplegia; also the senile changes carrying manifold variety of symptoms manifest when the brain and spinal cord are involved by a degeneration of tissues through faulty metabolism.

Unless the function of the lymph is recognized in such degenerative diseases and the correct treatment given, treatment must be faulty and of little avail.

In embolism and in hemorrhages, particularly into brain, if integrity is to be restored, the clots and foreign substances must be eliminated by and through the lymph channels. Some cases of hemiplegia, for instance, clear up; others remain paralyzed for life. In some cases of fractures and contusions, repair is rapid; some, alas, develop into malignant tumors. If the lymph circulation is normal, rapid absorption takes place. If, however, the lymph channels are obstructed, clots are not absorbed. Again, if a basic alkalosis is present, malignant disease may become manifest in the blocked lymph channels of the injured tissues.

Many cases of hypertension have been treated by use of the acid mineral solution with good results. The amount of sclerosed degenerative tissues determines the result of the treatment, but improvement always occurs. Cases of women over eighty years of age with arteriosclerosis have been kept in comfort by it. Its use does not prevent any other remedial treatment. The standard diet, such as a little meat or fish, avoidance of eggs and sugar, plenty of water, fruits, whole wheat bread, butter, and vegetables is prescribed. A tablet of Cactus compound is useful. Nitroglycerine gr. 1/100 in cases of angina pectoris is used until pain ceases; likewise intravenous injections of 10% 10 cc. of sodium iodide are occasionally used if indicated.

Cases of hemiplegia, even one year after, with paralysis of limbs and tongue, have been restored to almost a normal state by daily or biweekly intravenous injections of the acid mineral solution, at the same time it is given orally. Its administration opens blocked up lymph channels, dissolves blood clots, sets up an active phagocytosis and lymphocytosis, breaks down toxins and, above all, restores once again the nutrition of the injured cells. This is why in such cases also, as we shall show, in the degenerated myocardium of angina pectoris and other forms of cardiac degeneration, arteriosclerosis, and nephritis, results are so satisfactory—nay, at times, most spectacular.

Last summer the author met an old retired doctor in New Hampshire. He was seventy-nine years of age and in great despair. "What is the matter with you?" I asked. "Angina pectoris; the least exertion gives me terrible pain," he answered. "What are you doing for relief?" I inquired. "I am taking theocalcin and nitroglycerine, but they are useless," was the reply. "Who is your adviser?" we asked. "I have lately consulted Dr. —, the highest physician in Boston." "What did he advise?" I asked him. His reply was, "He advised that I should go to bed; 'Until you die. The sooner you die the sooner you will be out of your trouble.'" The author said, "I can fix you up all right." He replied, "You can go to it." The theocalcin was stopped, nitroglycerine used as needed for pain, and he was given orally the acid mineral solution six times daily. No intravenous injections were given. Improvement was steady. Within four weeks he was walking the fields; and early in September almost all discomfort had ceased. At this date he reports that his heart is greatly improved. The chapter on calcium indicates the futility of theocalcin in these affections of old age. Merely opening up a lymph stasis and improving cellular nutrition was all that was necessary in this case.

Other cases similar in character could be quoted that have been treated; all have responded to the acid mineral therapy. Also a case of toxic angina pectoris from tobacco poisoning with a marked induration of lower colon with gaseous fermentation has recovered from his troubles. All pre-

vious treatment by other physicians in central Florida had failed to help him. Needless to say this man is very appreciative.

Cases of arthritis have been materially relieved, especially the inflammatory lesions. In such cases the remedy must be given in small doses otherwise pain will increase. The author does not give more than one intravenous injection per week. In addition every night or every second night, the affected joints are painted with tincture of iodine, and, when dry, any animal fat available is rubbed into joint. This method we find to be far superior to the iodine ointment so liberally advertised to the medical world. When an irritation of the skin over diseased joint appears from the iodine, great relief and improved function appears also.

If syphilis is one of the causes of degeneration the acid mineral therapy is not discarded, but is used as an adjuvant to the treatment. For instance, the solution may be given with a mixed treatment tablet. This method is quite effective. It can be given combined with corrosive sublimate or added to the well known Trifolium compound containing five grains of potassium iodide to the drachm. As we shall show later, it renders effective other specific remedies, such as quinine in malaria, etc.

All experienced physicians are aware how children easily respond to effective treatment and how, in spite of the best chosen indicated remedy, people in advanced years fail to recover. The reason, in the light of a reduced hydrochloric acid gastric secretion, in advanced years, is easily understood, as all minerals in a normal digestion become chlorides. Again caution is most necessary in giving calomel while patient is taking the acid mineral solution, as the increased hydrochloric acid may change it to corrosive sublimate with severe poisoning following its administration.

Two years ago the writer examined a man forty-five years of age, a Government employee of Washington, D. C., who was near death from an agonizing angina pectoris. The least exertion caused blood pressure to rise, with greatly increased pain. He had been treated at various hospitals and by noted specialists to no avail. This case was a good test for the acid mineral therapy. If the waste of the cells in diseased



heart could be carried off and nutrition restored, he should recover from this desperate condition.

✓ He was given the acid mineral solution to be taken in fifteen-drop doses six times daily. The results from its use were most interesting. ✓ The third night following its administration he commenced to pass copious bilious stools which kept him up all night to his great alarm. He was assured, however, this was the best that could happen and he continued the treatment in fewer doses. After six weeks he had fully recovered, and the last information of him was that he was working at Muscle Shoals in good health and giving this remedy to his brother afflicted with the same trouble. All other treatments, such as nitroglycerine and heart stimulants, were stopped at beginning of treatment.

A recent letter from a physician in Texas tells of a man "literally snatched from the jaws of death" by use of this acid mineral solution. Is it any wonder, then, that those who have thoroughly proven this lymph stasis treatment make the so-called extravagant claims. Another case still under treatment is of great interest and will illustrate its action.

A small, stout woman about forty years of age was found near death with cardiac asthma. Adrenalin solution was given with morphine. Next day she was examined carefully and a large aneurysm in right chest was discovered; a syphilitic degeneration of heart muscle well developed, pulse 140, blood pressure below 100. She was given weekly injections of bismuth combined with naphthaline and iodine; also the acid mineral solution, with a mixed treatment tablet three times daily. Once a week her chest was painted with tincture of iodine, and she was told to put animal fat over the iodine when she reached home. The result was very satisfactory, for week by week the area of the aneurysm grew smaller; and today, three months later, although pulse registers around 120 per minute, her health is greatly improved and the asthmatic attacks no longer appear.

Although apoplexy, usually a hemiplegia, is ordinarily classed under nervous disorders by reason of its injury caused by the blood clots in the brain tissues, we wish to include it in this chapter, as, it is primarily caused by disease of the cranial

arteries. Under the customary treatment, but little relief can be given.

I will quote from another letter recently received from a specialist in Houston, Texas, who has used this acid mineral solution extensively in many cases of disease with the happiest results. He writes, "Success in another type of case will probably interest you. A man, age 56, apoplexy, a year ago. A complete paralysis of right side and loss of speech—evidently a hemorrhage in vicinity of Broca's area. Recovered sufficiently to enable him to walk by dragging right foot and leg. Right arm almost powerless, jerky palsied movements continuously, speech almost incoherent. Three weeks ago I put him on a. m. s., xx drops orally t. i. d., and xii minims intravenously daily for one week, then every other day to present date. Today he walks with only a slight limp, can execute almost any manual movement with right arm and hand, works in his garden, and speech is almost perfect. No other treatment that I have heard of has ever done this. Results in a definite long standing gastric ulcer are equally good, clinically cured. My results in a fairly long list of diseases have been so striking that I feel sure we are standing at the threshold of a new era in medical therapy."

Can we not visualize what happened in the brain tissue of this case of hemiplegia—the lymph channels engorged with broken down blood were opened, the waste products carried away, nutrition of brain cells restored, also blood vessels repaired.

A less striking case of a Portuguese fisherman of Fernandina, Florida, is also interesting: Age 57, syphilis twenty years before, was brought in a car eighty miles to this office and carried in and laid helpless on table. Examination showed a slight paralysis of facial muscles, complete paralysis of right arm and left leg. An intravenous injection of the acid mineral solution was given, also by mouth four times daily with a mixed treatment tablet. One week later he was brought back and this time with aid of two sticks he proudly walked in alone. Two weeks later, and at present date, arm is nearly normal and leg much improved. This case is of five months' duration.

What other treatment has the medical world to offer

these victims of diseased arteries? After thirty-six years of practice we realize that, if only such cases could be helped back to normal health, a triumphant and glorious victory has been won.

Before closing we wish to mention another case, its diagnosis or causation obscure, yet suffering from an undoubted stoppage of lymph in brain cavity. It was a man nearly sixty years of age, who fell dizzy and helpless, and was brought home in a truck. Examination showed no paralysis except in facial muscles and tongue, but did show a hernia of spinal cord about the sixth cervical vertebra, which could be pushed back to reappear after pressure of finger was removed; very unstable on feet. A lymph stasis of cranium was diagnosed with high cerebral pressure. The acid mineral solution was given by mouth and at the end of three weeks the patient was normal. One year later, the same condition, only worse, returned. Again the same treatment was used and same results were obtained. The remedy was continued four months and, so far, this man remains normal.

Other cases could be quoted. Enough has been given, however, to prove that degenerative changes in the lymphatic system are the cause of manifold diseases and clinical phenomena. We see it in nephritis, cardiac diseases, arteriosclerosis, as well as plebus sclerosis, blocked capillaries as in gangrene of the diabetic, and, doubtless, if we searched, we should find it to be the underlying factor in nearly all cases of the insane, neurotics, and also the victims of endocrine unbalance.

When nutrition is impaired and waste is retained, nerve terminals no longer function normally, tissue cells degenerate and die, and white connective scar tissues, which we call sclerosis, take their place. The condition is then beyond repair. To see beyond the names, to restore nutrition and lymph circulation, to forget germ infection for a while, but rather to open up lymph channels and allow the recuperative immunizing powers to assert their full sway, this is the duty of the true physician. This is the action of the acid mineral solution: To restore mineral deficiencies, chemical balance, and free circulation of the lymph stream, and not to supplant any specific treatment that has been found reliable and effective, but rather to add to its efficiency and power. The potassium salts

act as a food to the cardiac muscles. Dr. Robert A. Hatcher, of Cornell University Medical College, states: "It has been obvious from early times that the blood supply is essential for the normal functions of the heart, but it is only within recent times that we have come to understand the importance of extremely small amounts of certain salts of the blood and the influence exerted by even slight changes in its composition. Small amounts of potassium salts are essential for the heart-beat; large amounts are poisonous. It has been found recently that, under certain conditions, the behavior of the heart toward potassium is an index of its behavior toward therapeutic doses of drugs of the digitalis group, and those hearts which do not respond to potassium are incapable of benefiting by the use of digitalis."—*Chemistry in Medicine*.

On the other hand, the writer has discovered that it is those hearts that have a pronounced degeneration of the myocardium with valves intact which respond most effectively to the acid mineral therapy. It is these hearts that are so dangerous, so hard to diagnose, and so unfit for digitalis treatment that respond so completely to its therapeutic action. A few months ago a gray-haired woman with arrhythmia, blue finger-nails, and quite easily exhausted, was given the acid mineral solution by mouth. At the end of two months' treatment all signs of cardiac disturbance had disappeared. If we visualize the lymph channels opened and cleaned, the muscles fed with the needed salts and the pH balance restored, we no longer wonder why such reports, at first so unbelievable, are so frequently reported by other proponents of this new form of therapy.



## CHAPTER XVIII

### SKIN DISEASES

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Pathological changes in the skin, like disturbances of other tissues, when not caused by invasion of parasitic life, are probably dependent upon a variation of the pH acid base value. As previously stated, when a hypochlorhydria exists, nature retains waste acids of the metabolism to keep the tissues in the pH ratio necessary for the life cycle. This ratio probably lies between pH 7.1 and 7.8. Beyond these limits life is, seemingly, impossible. ✓

Again, a phosphorus or a potassium deficiency may exist, which quite common condition, the author believes, is due to the modern diet. For instance, the white flours are deprived of the life germ and also of the minerals, which—when deficient in the soil—cause widespread rots and varied molds to grow on roots and ears of the corn plants: So in human life these deficiencies permit the ever-present microorganisms to propagate upon the skin. All have seen cases of psoriasis, pityriasis and chronic eczema persisting in spite of all forms of treatment. We have previously mentioned how an increase in the pH value of the lymph permits a loss of immunity and an acceleration of microbic life to take place. This changed pH value must be present in hypochlorhydria. When a hydrochloric acid solution is injected into the blood stream this deficiency is relieved. This normal acid, if deficient in the organism, is rapidly absorbed and revitalizes the cells. Such patients feel exhilarated, they have renewed vigor through this modification of the pH value in the fluids of the body. Hydrochloric acid increases the normal immunity, sets up an active phagocytosis and a leucocytosis, and recovery begins. The addition of the potassium salts causes an increase of the normal gastric acidity, a better digestion, assimilation, and therefore a more normal flora in the digestive tract.

A tropical vesicular or pustular erythema is common in Florida, especially in the summer. Victims sometimes are almost covered by an intensely red eruption that may go on ✓



into furuncles; are troubled with an intense itching and formation. All alkaline applications are futile. When the hydrochloric acid mineral solution is given by vein and mouth rapid relief appears. A man who peddled vegetables in the hot sun all day came in for relief. He had large areas of erythema of a vivid red color, covered with abrasions from a comb with which he scratched himself continuously all night long. Previous treatment by another physician was futile.

An intravenous injection of hydrochloric acid, one part to 600, with potassium salts, 10 cc., was given him; orally, 15 drops four times daily. Two days later he reappeared asking for a similar injection, the former one having given him so great relief.

As stated before, this remedy is not to take the place of any reliable specific in any disease, but rather to augment and assist, either by eliminating or breaking down of waste products, be they organic acids or precipitated salts. In all cases of eczema and other forms of chronic skin diseases, including syphilis, the writer uses it to assist and augment the usual treatment. Recently a penniless woman came in covered with the secondary eruption of syphilis, with all its accompanying lesions, mucous patches, loosening hair, bone pains, fever, etc., with the venereal crown quite well developed. As she had no money even for medicine, a six-ounce bottle of the acid mineral solution was made up—one-half ounce of the solution to six ounces of water with a one grain tablet of corrosive sublimate added to it. Dose, one teaspoonful, well diluted, six times daily. After a few weeks' treatment with this solution all symptoms had nearly disappeared.

The second aspect of skin diseases, the septic form, is a little better field for its use. In this city many shrimp fishermen make their headquarters during the winter months. These men are peculiarly subject to an eruption of furuncles or boils on hands and arms, which they call fish poisoning. They persist week after week; sometimes twelve or more boils will be present at the same time. If these boils are incised, grave consequences may ensue and an incurable diseased condition may be set up.

The results in these fishermen of an intravenous injection of the acid mineral solution, also administration by mouth, is

seemingly miraculous, for the lesions immediately dry, fall off, and disappear; no local treatment is necessary, indicating that this fish poisoning is really an allergic reaction.

Reports have been sent to the writer of chronic abscesses of feet, running sores and so forth of years' duration that disappear after its administration. One case the writer treated had a diseased foot for over eighteen years, with horny growths underlaid with pus. By taking the acid solution for a few months this patient completely regained her health. This condition, this woman thought, originated from a pyelitis of the kidney, which too became normal. The tremendous and varied field of skin diseases has scarcely been touched. Other progressive physicians will doubtless investigate its value and demonstrate its true field in many aspects of chronic skin diseases.

The Vaughan Brothers fully demonstrated many years ago that the virus from snakes and scorpions, from diphtheria and tuberculosis, etc., contain a primary protein that is identical in all toxins. Mention has been made of guanidine, how quickly its toxic property is destroyed by acetic acid; so, in these snake and other venoms, the protein poisons of syphilis and tuberculosis are vulnerable to the destructive action of hydrochloric acid. This is also nature's own weapon, put into our bodies by the creative power manifest in the upward evolutionary process. No wonder then that reports from so many places indicate its wondrous, manifold therapeutic and curative properties.

The field is too vast for one physician to cover. Cases of psoriasis have been materially aided when lesions have been scrubbed with one per cent. hydrochloric acid daily and then a healing oil applied; furunculoses are no longer feared; when such lesions are encountered, the author injects by a hypodermic syringe a few minims of phenol to the bottom of the lesion. This injection relieves pain and arrests the progress of the boil. A layer of antiphlogistine or a similar preparation is then applied and before long the contents of the furuncle are spontaneously evacuated; likewise in carbuncles, when seen early, this treatment avoids necessity for incision.

Small unbroken cancer lesions, known as epitheliomata, are easily removed by scrubbing off the crusts and diseased

cells by a piece of gauze on the finger soaked in Fowler's solution of arsenicum. Any bleeding points are touched with a solution of adrenalin, or tincture of iron; then boric acid powder is applied. The patient is instructed to wash lesion and apply the boric acid powder several times daily. At the same time the acid mineral solution is given by vein and orally, as before described. Rapid repair and a non-recurrence is the common result.

Whenever these lesions are found search should be made for a mother growth. Quite frequently when these cancer lesions appear on face or in nasal passages, a cancerous invasion may be found at outlet of the stomach, sometimes in the prostate. The internal treatment, either of the acid potassium formula or the acid benzoic solution in advanced stages, materially aids these patients.

When a cancer invasion has destroyed the skin and the underlying fascia is exposed, a ten per cent. dilution of the acid mineral solution, applied locally as a compress, seems to alleviate materially and assist in repair of the lesion.

While in Vermont in September, 1934, the author left a bottle of this acid mineral solution with a friend. It was given to an elderly minister in charge of a prison. He had had a small cancer lesion on his left cheek for four years, which had been treated at various times by X-ray and radium therapy to no avail. Of his own volition, each time as he took 3 to 25 drops internally, he wet his finger with the solution in the bottle and applied it to the cancer lesion. At the end of six weeks' treatment this lesion had completely healed. Was it not that the circulation of the lymph vessels had been restored; that the germicidal action of hydrochloric acid also destroyed the local cancer virus? We think so. The result, no matter how one theorizes, was to him eminently satisfactory.

The acid mineral solution should be looked upon as a valuable adjuvant treatment in all skin diseases, and its use will make possible curative results when local treatment alone is of but little value. It displaces no other indicated or specific remedies but materially aids their efficacy when given in conjunction with the hydrochloric acid solutions.

Time alone, by many clinicians and many cases, will prove and justify these claims, sift out the errors, perfect the

treatment, establish dosage and proportions and modifications of our formulas. The author can but leave these scanty records to the scrutiny of his fellow physicians and, in so doing, has discharged his obligation to the ethical requirements of the medical profession. Whether these records are accepted or not, still the fact remains—that the Great Creator has put into the chemistry of our own bodies this peculiar acid, composed of chlorine and hydrogen gases, dissolved in water, to digest, sterilize, preserve and repair their tissues. We, the servants of mankind, cannot do better than follow nature, seek to unfold her mysteries, use her weapons and, submissive to her laws, win a glorious victory over disease and premature death.

## CHAPTER XIX

### ACID MINERAL THERAPY IN PROSTATIC DISEASE

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The treatment of enlarged and swollen prostates is another field of therapeutics where ordinary methods are woefully inefficient, but especially satisfactory when the acid mineral solution is given by mouth and by intravenous administration. This common condition so prevalent especially in aged men, with its retention of urine, frequent and distressing micturition, its alkaline, oftentimes septic, ammoniacal urine, its tendency to involve kidneys and adjacent organs, is one that defies the best efforts of medical science.

Yet on the other hand reports come in, verified by the writer's own experience, that by giving these victims of prostatic disease frequent intravenous injections of either simple solutions of hydrochloric acid, or better still combined with potassium and other mineral salts, most gratifying therapeutic results have been obtained.

Prostatic hypertrophy is a complete picture of lymph blockage. The gland slowly but surely becomes more and more congested by the blocking of its nutrient canals, and as normal gland cells become diseased and atrophy, the ubiquitous connective or scar tissue cells gradually cause the affected gland to become hard, its natural contours changed, and no longer able to harmonize with the sphincters of the bladder. We find enlargements of its lobes, median bars and involvement and displacement of the trigon in cystic neck—therefore retention and residual urine, with all its consequent distressing symptoms. At last ammoniacal urine appears and a persistent leaking, so that the patient becomes a nuisance to himself and others.

For this condition, two treatments are in use. First, prostatic massage; this at times reduces the lymph engorgement and is valuable in early cases, but cannot open up again the blocked lymph spaces and vessels. Secondly, operative measures either from within the prostatic urethra or removal



from without with their inevitable distress and dangers. Just what effect can be expected from the hydrochloric acid mineral solution? First of all, and most important, is the change of the chemical reaction of the urine. Ammoniacal fumes soon disappear, a normal acid secretion taking its place. This alone gives great relief to the distressing symptoms of this affection. As before illustrated in other diseases, the blocked lymph channels are slowly opened, the irritating waste products are drained away, and the healing, nutritive lymph once again flows through the gland tissues—this our confreres of past generations called the “*vis naturae*,” which sounds big but explains nothing. Only experience in such cases with this acid treatment can convince one of its value. Adjuvant treatment, massage, gland therapy may be indicated, also remedies tried and valuable such as *buchu*, *digitalis*, etc., may be needed.

The writer sees no need of urotropin or dye antiseptics as the change in the chemical reaction, the sterilizing power of chlorine when liberated into the blood stream is most effective.

Dr. Burr Ferguson has reported most gratifying results from the use of hydrochloric acid alone, one to one thousand solution. The writer prefers to use the acid mineral compound for two reasons; first, that the acid content can be increased to one part to five hundred of distilled water, as it is buffered by the admixture of mineral salts; and secondly, he believes the addition of potassium to the solution enables the organism to secrete more of its own normal acid, tones up the body to renewed vigor, and thus obviates the need of constant administration of hydrochloric acid.

Benzoic acid, usually prescribed as the sodium benzoate, is also helpful. During the early months of 1935, all cases of enlarged prostates were given the acid benzoic formula, with most beneficial results. Every case, even those who did not receive intravenous therapy, reported that all their symptoms of this disease were greatly alleviated. Examination disclosed steady diminution in these hypertrophied organs.

The case reported in another chapter on cancerous disease, who, 84 years of age, had in addition to many afflictions a stony cancerous growth at neck of his bladder, was delighted at the mitigation of his urinary troubles.

In all cases the urinary frequency, especially at night, was

reduced to normal. The best results were obtained when the acid benzoic solution was taken either in rain or distilled water. Coincident with the reduction in size and urinary distress was the return to normal of the patient's urine. So far no study has yet been made as to the value of the benzoic solution in nephritis. As this benzoic acid solution, so easy to take, so non-irritating to any organ, has the virtue of not only modifying favorably the pH of the tissues, absolutely necessary if germ invasion is to be destroyed, but also of rendering the urine sterile; it should be given freely in diseases of those organs.

If a prostate gland has become the site of a malignant growth, the benzoic acid solution is still indicated and relief will follow its administration. Tuberculosis of kidneys and nephritic calculi can be aided; a solution of iodine may be added to it for such conditions. One drachm of soluble iodine (Burnham's) to the ounce is helpful. The free iodine thrown off through the kidneys coming in contact with the calculi helps to dissolve these accretions; the relief of congestion by the action of iodine also aids in recovery. In short, all cases of infection of the urinary tract can be greatly helped and oftentimes cured by the "acid benzoic acid" formula.

The administration of the acid mineral solution, then, in short, is so satisfactory, so effective, that the writer no longer dreads such cases, but can go forward with utmost confidence of a therapeutic victory, with no need of danger or shock from operative surgical measures. He does not mean, however, that if strictures are present they should not be dilated, either in man or woman; he does not mean that prostatic massage is not valuable, or that any adjuvant treatment is not advisable, or that residual contents of bladder should not be catheterized off or that a cancerous involvement should not be removed. Rather the opposite. What he does mean is, that taken early enough, this form of therapy is so effective that other measures are unnecessary, and that even in advanced cases great relief from frequent micturition, constant dribbling and urinary distress can be gained.

Before closing this chapter, the writer wishes to say that this same therapy is likewise indicated in the chronic cystitis of elderly women. A case of a woman nearly seventy years of

age comes to mind, who came to him several years ago. She had had a cystitis for many years and had gone the rounds of hospitals and other physicians to no avail. Speedily the acid mineral treatment relieved her and she took it off and on for three years. Now she has entirely recovered—showing its superiority over bladder lavage and ordinary remedies. With this treatment came not only relief, but a renewal of vigor and health, also protection from other forms of degeneration so present in senile people.

## CHAPTER XX

### NEOPLASTIC DISEASES

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In this controversial field of medicine, so extensive and yet so vague, hydrochloric acid is being used more and more extensively. Cures have been claimed, yet many failures show that its possibilities are but little understood and the underlying factors that cause such a great variety of neoplastic growths still remain unsolved.

Each research worker seemingly has his own theory as to their causation and treatment. One group of investigators looks to prenatal conditions in the ovum; another to heredity and misplaced cells; some claim cancer is caused by inflammations, contusions and irritation from external and internal causes, such as burns, pipes, soot, dyes, etc.; yet no general law of causation has been established. The wide variety of neoplasms and malignant lesions seemingly indicates a multiplicity of conditions that bring forth parasitic and adventitious tissues.

It is not the intention of the writer to go into details. The etiology and history of these widespread diseases are best considered in the text books devoted to that field of medical science.

It is necessary, however, to state the relationship of the acid mineral therapy to this group of diseases—not alone human but found also in the animal and vegetable kingdoms. It was through seeking some effective way of treating cancerous disease, that brought the author into the study of hydrochloric acid and, later, of potassium and other minerals. As soon as the hydrochloric acid was used in cancer cases they showed great improvement in symptoms and, although the early cases, usually far advanced in this dire disease, died, yet results were at times so spectacular that cures were hoped for. That these cases of pyloric, gastric and mammary cancer were fatal, urged the writer on to further search. A few cases of pre-cancer or lymph stasis cleared up rapidly, and stimulated further search as to why these fine results were obtained in

some cases, whereas in other cases there was improvement followed eventually by death.

Before going further it seems best to mention just what is generally accepted by medical authorities concerning neoplastic growths, and then add to this list the claims of the writer, and later add the results derived from the acid mineral therapy.

Taking dilute hydrochloric acid as a basic solution, the writer added the following-named chemicals one by one: Magnesium, calcium, fluoride, manganese, silicon, potassium, iodine, etc., and according as results showed improvement or failure he retained or eliminated them, not alone in cancerous growths but also in other progressive diseases. One by one these were combined with hydrochloric acid solution, their therapeutic action watched and studied; one by one they were eliminated until only potassium, arsenicum and silicon remained. Later, an organic acid was added to the acid solution and at present promises great help in cancerous diseases. More about this will be stated later.

The generally accepted conclusions of the majority of research biochemists in neoplastic diseases are as follows:

*First*, a condition known as alkalosis is present in cancerous diseases.

*Second*, there is a loss of nerve control over cell mitosis.

*Third*, there is a lymph stasis.

*Fourth*, there is an increase of glucose in the blood.

To the above list the writer adds the following conclusions of his own:

*Fifth*, there is a hypochlorhydria or abnormal decrease of hydrochloric acid in gastric secretion.

*Sixth*, alkalosis, as already explained, causes a retention of lactic acid in the blood stream.

*Seventh*, lymph stasis is caused by an alkalosis that tends to precipitation of salts from an imperfect metabolism into the lymph spaces.

*Eighth*, cancer itself is but one phase of degeneration of tissues, chiefly seen in advanced years, yet occasionally present at all periods of life, possibly even before birth.

*Ninth*, that malignancy is caused by the presence of an unknown virus.



*Tenth*, that hydrochloric acid with potassium increases the hydrochloric acid in the gastric juice.

*Eleventh*, that hydrochloric acid given alone does not increase the hydrochloric acid of gastric acid cell secretion or destroy alkalosis, and must be continued indefinitely, if deficient.

*Twelfth*, that potassium given after this acid secretion is restored, tends to injure cases of advanced cancerous disease.

*Thirteenth*, that X-ray treatment, if used in excess, sets up a lymph stasis. It does not correct the pH value of the tissues and, by liberating sodium iodine and calcium from the cells, induces metastases.

*Fourteenth*, that both radium and X-rays cause cancerous affections, produce lymph stasis and aggravate the progress of disease in malignant cases.

*Fifteenth*, that cancer can be prevented by application of biological laws.

*Sixteenth*, that a pre-cancerous condition is present before cancer appears.

We will take up, one by one, these varied claims, and afterwards add a few illustrative cases to make the above claims clear and acceptable to unprejudiced minds.

The first point made by biochemists was that an alkalosis is present in cancerous disease. Although this condition has been explained in previous chapters, we will add some corroborative evidence from other authoritative sources, so that all doubt may be removed from the reader's mind. In *Neoplastic Diseases* by James Ewing, page 71, we find the following:

"Alkalescence of Blood—Determinations of the alkalescence of the blood have yielded results which differ with the method employed and the particular factors brought into consideration. Klemperer found a reduced amount of  $\text{CO}_2$  in the blood of advanced cancer. Peiper, titrating the whole blood, found very low grades of alkalescence in advanced cachexia . . . Yet H. Strauss, titrating laked blood, found marked variations, some cases showing normal and some increased alkalescence.

"Methods dealing with the serum yield directly opposite results. In 1906 Moore and Wilson found that the serum

alkalinescence to dimethyl-amidoazobenzol showed a striking increase in cancer as compared with healthy subjects and other hospital patients, while the basic capacity of the inorganic salts after removal of proteins by incineration showed a small but distinct increase. Gamble, Royle and Watson secured similar results by the same methods in both carcinoma and sarcoma, but in very advanced cachexia the alkalinity was barely above normal. Neither extirpation nor X-ray treatment produced any change. Sturrock improved the dimethyl technic and found an average alkalinity of the serum of 0.190 N. and often more than 0.200 N. in cancer."

In a paper by Ellice McDonald entitled *Some Chemical Aspects of Cancer Research* we find the following statement: "The higher the pH the larger is the glycolysis; and we have found that the pH of the blood plasma in untreated cancer cases is more alkaline than normal, with 18.2 per cent. greater alkalinity. The greater the alkalinity of the blood plasma, the faster cancer grows; and the shorter the duration of the patient's life."

In the above statement of Doctor McDonald we see clearly the reason why hydrochloric acid injections improve the condition of cancer victims; yet if it were possible to make nature herself produce more of this vital acid, much better curative results would inevitably follow. That lactic acid in the patient's tissues is in excess, especially so in cancer growths, has been claimed by many biochemists. The main point here to remember is that this lactic acid increase is present in alkalosis. The writer has taken the pH reaction of cancer discharge and has found it approximately over 7.8 by a test later to be described. Dr. McDonald in the above-mentioned paper again writes: "The rate of formation of lactic acid in cancer is five to twenty times that of normal, and this quality is inherited in succeeding generations of cancer cells."

The second claim of biochemists—that of loss of nerve control of cell proliferation—is axiomatic. When cells become blocked off as Dr. Handley has so clearly pictured in an earlier chapter, this blocking causes atrophy of the nerve terminals. In health the reproduction of all tissue cells is governed and controlled by the sympathetic nervous system, which

is dependent on an endocrine balance. When, for instance, adult life is attained, the varied organs of body stop increasing in size. Likewise, as in pregnancy, labor begins at term by reason of this same governing vital function. After an injury has healed, proliferation of cells ceases, and the mooted point is this: If control is lost, with a lymph stasis present in that location, may not such an injury give rise to a neoplastic or cancerous lesion?

Present in this lymph stasis, as before stated, there must be retained toxins and debris from clots, pus cells and phagocytes; also, a reduced oxygen supply, and possibly increased lactic acid secretion. Whether, in some cases, a lymph stasis may appear from a central nervous disorder is quite possible, although so far no proof has yet been advanced.

Lymph stasis in any tissue is possible, whether of unknown origin or from injury, such as contusion, cuts, fractures of bones, or from septic or even endocrine disturbances. However, it does not necessarily follow that tumor or cancer degeneration is inevitable. Many have had fractured bones even in senile years, many have a lacerated uterine cervix, many have a low-grade gastritis or cystitis, but die from other causes and with no signs of cancerous disease. Not every case, even of marked alkalosis, develops cancerous disease; therefore, some other factor must be involved.

Fourth, hyperglycemia of cancer is well-established. In the *Bio-chemical Journal*, Vol. XXVI, the report of work done by Gladys E. Woodward and Edith G. Fry may be found. Only a brief account can be given here. This work was carried on in the Cancer Research Laboratories in Philadelphia and reported in 1932. These biologists state, "An essential difference between tumor tissue and normal tissue is in the increased ability of the former to glycolyse carbohydrate. Warburg and others have shown that isolated but surviving cancerous tissues transform glucose completely into lactic acid. This sugar cleavage is a source of energy which enables the cancer cell to live anaerobically, while, under similar conditions, the normal cell dies. Cori and Cori found that blood, in passing through a tumor in situ, gains an amount of lactic acid almost equivalent to the quantity of sugar disappearing." Before going further it is well to note that in normal metab-

olism lactic acid is broken down in the blood to  $\text{CO}_2$  and to glycogen. In cancer the glycogen is not returned to the tissues and it was shown that increase of blood sugar markedly increases amount of cancer cell divisions or mitosis. The above mentioned biochemists summarized their work by saying that the blood sugar level in 52 untreated cases was 20 mg./100 above normal. Treatment in other cancer cases produced no change in this blood level.

In *Neoplastic Diseases*, by Ewing, it is further stated that "hyperglycemia with a percentage of glucose reaching 0.33 was regularly found in the blood of cancer by Freud and again in many cases by Trinkler."

We have seen in the chapter on diabetes how the hydrochloric acid therapy modifies the glucose in the blood. This acid must have much the same effect on the increased sugar content in cancerous disease and this is probably why improvement is found in cases reported treated by hydrochloric acid.

As to the fifth and sixth claims, the relation of hypochlorhydria to an increase of lactic acid has been covered in a preceding chapter.

Regarding the seventh claim, Dr. Sampson Handley, previously quoted, describes minutely the physiology of a lymph stasis. As neoplastic disease has multiform variations, we may safely conclude, as James Ewing stated, that there may be various causes. So in lymph stases, before all is said and done, various forms and causes of lymph stasis will be recorded. In some, perchance, it may be deposits of iron from a potassium or hydrochloric acid deficiency. It may be that these two conditions are one and the same, for iron deposits from broken down hemoglobin in anemia are found in the tissues (lymph channels) of liver and kidneys. Again it may be deposits of metals such as mercury, lead or aluminum or, again, deposits of sodium biurate, calcium carbonate or uric acid. Septic conditions cause lymph stasis, as seen in ankles or knees, from infected teeth, appendix or gall bladder.

That a lymph stasis precedes tumor formation is readily understood, but why does malignancy seemingly depend upon an alkalosis of tissues?

Eighth, that cancer is but one phase of degenerative disease is plainly evident in cancer of senile patients. Tubercu-



losis, diabetes, myocardial degeneration, sclerosed arteries, prostatic enlargement, keratosis of skin and diseased kidneys are common complications in such cases.

Ninth, are malignant growths caused by an unknown virus? That cancer is differentiated from other tumor formations by certain phenomena all are aware. Its power to produce metastases, its anemia, fever, emaciation, cachexia, its tendency to recurrence after operation, the involvement of lymphatic glands as in septic infection, its peculiar penetrating odor in broken down cancerous tissues, all point to a possible invasion by an unknown, perhaps undiscoverable microorganism. What is meant by a virus? A satisfactory answer would be "a filterable sub-microscopic form of life." Can a virus be an organism? Is it a gaseous organism capable of passing through the minute interstices of a porcelain filter, invisible and unstainable in best of microscopes? We think so. One day, while conversing in the United States Agricultural Bureau with a specialist on hoof and mouth disease of cattle, this expert asked, "What is this virus?" We replied, "It is a microorganism." At once he shouted, "How do you know?" The answer, as quickly given, was "Life without a vehicle to function in, is undifferentiated." This answer settled the question by being unanswerable. Not every one becomes cancerous, yet this virus probably is ubiquitous. Two persons may eat the the same food, breathe the same air, sleep in the same bed, and "one may be taken and the other left"; one may become infected and die of cancer; the other one is seemingly immune. When humanity discovers why, cancer can be mastered and prevented from claiming its many victims, young and old, as now; for no one is immune to its ravages.

Tenth, hydrochloric acid, as previously explained, gives off free chlorine ions. During digestion hydrogen is set free to form more acid in gastric cells; also to keep the pH of the body in balance. We wish to take up another aspect of the increased pH value in the tissues and try to suggest, at least, the reason why an increased mitosis or reproduction of cells is so characteristic of malignant disease. The embryonic action of cancer cells has been mentioned by many research biologists. When an ovum becomes fertilized a most rapid growth of cells appear. They speedily become differentiated



into different varieties, assume their places in the three layers of embryonic life. Cancer cells multiply, but without order and rhythm: Can the pH potential have any bearing upon this well known phenomena? It is seemingly impossible to obtain the pH value of a human ovum but, if we examine the pH value of the white of an egg we find it stated that its value is pH 7.6 to 8. If the analogy is correct, the embryonic cells are in a state of pronounced alkalosis. This same condition of alkalosis is found also in cancerous plasma and lymph. As evolution of the embryo goes forward, mitosis slows down until in adult life we find cell reproduction at its slowest point. But in a cancerous tumor this normal mitosis is changed and an embryonic activity appears as in the original alkalosis of the ovum. In malignant tumors an increase of blood vessels soon forms, the tumor feeds on an excess of blood sugar, creates lactic acid profusely, which—unlike the normal lactic acid by-product of normal tissues—becomes an active toxin; yet, in spite of this acid formation the serous discharge of breast cancers are highly alkaline, as is also the serum in the tissues of these cancer victims. Potassium given with the dilute hydrochloric acid materially aids in restoring the normal gastric fluid; but to expect this restoration to cure malignant disease when well advanced is foolish and futile. In pre-cancerous conditions the congested areas, by administration of this acid-potassium solution, will be rapidly dissipated. This result has raised wild expectations of a cancer cure when an adrenal cortex extract in a solution of hydrochloric acid was exploited in California several years ago.

Twelfth, when the potassium salts have supplied this mineral deficiency, its further administration will but aggravate the disease, as this metal causes a breaking down and, like iodine, an absorption of diseased tissues, and is contraindicated in advanced cases of malignant disease.

Thirteenth, treatment by X-ray therapy does not in any way modify a present alkalosis or produce a cancer immunity. It may, if given to excess, by reason of liberation of calcium and iodine from the cells, as Prof. Chidester has explained, cause a widespread metastases of the growth. In excess it produces an intractable lymph stasis called X-ray burns or erythema. X-ray treatment has caused a slow, progressive,

intractable form of malignant disease known as X-ray cancer. To use it to produce erythema is criminal, at least. If, however, the formation of excess lactic acid can be arrested then perchance X-ray therapy may be helpful. These same rules apply also to excessive radium therapy.

The remaining points for discussion will be taken up in the next chapter, where a method of producing a cancer immunity will be mentioned; also how this treatment lowers the pH reaction of the human tissues, checks microbic life, and, so far, is harmless to health, and in the author's cases, seems to promise results far beyond any treatment he has hitherto used.

## CHAPTER XXI

### NEOPLASTIC DISEASES—*Continued*

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In the preceding chapter we have covered the biologic factors of benign and malignant growths; also the biochemical variations from the normal that precede and accompany their appearance and accelerate their growth. We have also touched upon some of the toxic conditions that appear in malignant disease, without going into a mass of details concerning the varied aspects of neoplastic growths. It is the purpose of the writer not to cover that which has already been covered before by competent men conversant with the manifold variations of neoplastic disease, but to write of the underlying occult factors that produce these lesions, and to tell of the treatment that has enabled him successfully to aid or relieve some of these malignant conditions, in order that other investigators, perchance, may be aided to carry forward this line of research to greater and better curative results.

The ethics of the medical profession, unlike those outside its ranks, demand that, if any improvement, method, discovery or remedy is found that gives better curative results than hitherto recorded, such information, through publication, must be made available to the entire medical world, in order that all may be aided; also, that any valuable discovery may not be lost to posterity. That such information may be sarcastically derided and soundly denounced is, of course, to be expected. The history of medicine and of all other branches of science, as well as of theology, amply confirms this.

The question now before us is whether cancer can be successfully treated by chemical means. We will quote again Dr. Ellice McDonald mentioned in the preceding chapter.

"Cancer is the most important problem of our time because of the great death rate and the enormous increase of incidence within the last twenty-five years. There is great need for research to discover new facts about the disease for its prevention and cure. The problem should be attacked from the consideration of the chemistry of vital systems, in which

the cell, the smallest particle capable of sustaining life, is the unit.

"A model concept of such a biological system may be set up in four components: (1) nucleus, (2) protoplasm, (3) cell membrane, and (4) environment. Each of these phases is of importance in the heterogenous vital system. The cancer cell has been shown to have a different set of chemical reactions (metabolism) from normal cells. There is a defect in the oxidative processes and a larger production of lactic acid. The degradation of glycogen (the sole source of cell energy) to lactic acid apparently follows a different path in cancer. The nature of the injury to the oxidative processes of the cell is the most significant fact of present-day cancer research. The repair of this injury and the production of a more oxidizing potential than the limiting oxidation-reduction potentiation necessary to cell division gives hope of transforming the cancer cell back to a normal chemical metabolism. *A chemical cure of cancer seems, therefore, only a matter of time, trouble, and intelligent effort.*"

This book is devoted to biochemical treatment. To mention other methods such as surgery, etc., would be but to obscure its purpose. All measures, when not conflicting in results, should be employed. As a tree is helped by lopping off a dead branch, so, likewise, is a patient aided when, for instance, a toxic decaying mammary cancer is removed. The relief from the absorption of cancer virus and toxins is a tremendous aid to recovery.

If we could but visualize the pathology, for instance, of a gastric ulcer, we should see first of all a blocking of the lymph channels in the area involved. This stasis would shut off the nutrient fluids, also oxygen, from the cells. Likewise, a retention of toxic acids and other products of metabolic life would accumulate and cause an inflammatory congestion that accompanies this affection. Then would follow a coagulation necrosis with destruction of the epithelial cells. If the lymph stasis that causes the sore is relieved, healing takes place. This condition is commonly seen in herpes labialis, or cold sores. If, on the other hand, this lymph stasis, by reason of the blocking of the nutrient channels by ferric salts or other deposits be not relieved, the involved cells, by reason of the

induced oxygen deficiency, necessarily become anaerobic. When this takes place lactic acid is liberated by these diseased cells and must be neutralized by the basic salts of the blood. In such a condition we have the beginning of a cancerous growth and commencement of an alkalosis.

If, however, recurrence of growth or its reappearance in other parts of the body can be prevented and controlled and, above all else, if the conditions preceding the appearance of cancerous lesions were understood and changed to normal, cancer would no longer be feared. No longer would mutilating operative surgery be performed; simply the growth removed, the site treated by a chemical that destroys the virus and cancer cells and aids in rapid repair, with a minimum of scar tissue. Nothing else would be necessary.

It is with this aim in mind that the author writes down his theories and results, and explains the varied forms of treatment used by him. It must also be borne in mind that truth is progressive; it must evolve and it must be cleansed continuously from error and misapprehension. Only by continued application, by many students, can it be polished and placed on the standard of integrity and set upon a solid foundation that time and further development may never displace.

The concluding sentence quoted from Dr. E. McDonald—"A chemical cure of cancer seems, therefore, only a matter of time, trouble and intelligent effort"—is a belief held by many biologists.

The first biochemical query is, "Does a pre-cancerous lymph stasis exist before malignancy begins?" The two following case reports, the writer believes, prove this assertion to be true, and they also incidentally explain the tremendous excitement created and the consequent reaction when the treatment of cancer by a solution of hydrochloric acid and adrenal cortex gained widespread newspaper notoriety.

A woman, aged forty-two years, seven years before had her fallopian tubes removed for Neisserian infection. Four years ago the writer opened an abscess in her left labia from same cause. On December 31, 1933, she came in complaining of a painless swelling at the same location. Examination disclosed a large soft mass with two small indurations the size of peas near site of previous incision. A diagnosis was made,



✓ although no inguinal glands were involved, of early cancerous disease. A weekly intravenous injection of the acid mineral solution was given; also the same solution by mouth. By the end of the following month all signs of the growth had disappeared and health was excellent.

Another case of a man, aged sixty-two years, came in on September 2, 1930. He had had a suprapubic operation one year before for removal of a large calculus in bladder. Examination showed a hard mass the size of an orange in site of scar in bladder wall. Similar treatment was given, and within a month tumor had melted away. At this time, four years later, no growth has reappeared but the toxic condition still continued. Also an ulcer and inflammation of cornea appeared on an injured eye with a lens opacity. One month ago this man was given the organic acid and hydrochloric acid solution later to be described. The ulcer healed and the occult toxemia has been eliminated, with a great improvement in health and vitality and in bladder irritability.

Injuries and chronic inflammation, too, have their influence upon cancer etiology.

Dr. W. B. Bainbridge, of New York City, is quite convinced that injuries play a large part in the production of cancerous growths. As before explained, a lymph stasis is set up by inflammation or injury to any tissue. If an alkalosis is present the cancer occult virus may propagate in the injured tissues. The retained lymph and toxins and the deficiency of oxygen, as before explained, create the conditions favorable to its growth. In a lengthy paper printed in the *Medical Times*, May, 1934, after quoting many undoubted authorities that trauma (injury) often precedes cancer growths, Dr. Bainbridge states that he "realizes, naturally, that all blows do not result in cancer, and that all cancers at the sites of injuries may not be the result of traumas, but in a number of cases observed, where there are definite steps, from the injury to the tumor, it is his opinion that the finger of proof points directly to the trauma, as such, as the cause of the subsequent malignancy."

In the light of the above statements, that show how necessary it is to hasten quick repair after trauma or fracture of bones occurs, the writer's own experience is quite helpful as to

the value of the acid mineral solution. In the month of July, 1933, while attempting to cross a street in Washington, D. C., he was side-swiped by an auto-truck. His head was caught in its open window and he was dragged quite a distance before the driver realized he had struck him and stopped his car. The author was taken to a nearby hospital and remained unconscious for about six hours, and was reported killed. X-ray films showed a frontal fracture to left ear; a basic cranial fracture present did not show in plates; a fracture of lower jaw, tip of left shoulder and both bones at left ankle were also fractured, plus cuts and contusions. He was sixty-three years of age. In addition to these injuries his prostate was infected by a catheter the following day. Fearing a prostate operation, he escaped from the hospital on the fourth day after the accident and commenced taking the acid mineral solution. Ten days later the writer travelled alone on train to New Hampshire to escape the heat, and, at the end of two months, returned to his practice, although still dizzy with vertigo from injury to ear. No trouble appeared in any of the fractured bones, and prostate is now nearly normal. The author credits this rapid convalescence to the hydrochloric acid mineral therapy that causes rapid phagocytosis, destruction of toxins, and restoration of injured tissues. ✓

The following case, previously reported is of great interest, for she is still under treatment. M. J., married, aged thirty-six years, no children. Pus tubes and ovaries were removed eight years before; weight 125 pounds. A lump in right breast was discovered by her in January, 1932. First seen by writer May 1, 1934. A very large necrosing cancer of right breast was present, an axillary gland the size of a small egg, also indurated glands in right side of neck. A local surgeon kindly consented to remove this decaying breast; in so doing an extreme number of blood vessels had to be ligated, indicating extreme malignancy; the enlarged glands were left untouched. A septic root of a tooth in right lower jaw was held as partly responsible for the invasion of the cervical glands. Five days later she returned from the hospital with wound gaping open, stitches pulling through, and the characteristic cancer lymph discharging profusely. At extreme end of incision over the sternum for about one inch heal-

ing had taken place. This healing by first intention is noteworthy in the subsequent developments. Here was an opportunity to prove or disprove the presence of a cancer virus.

Intravenous injections of the acid mineral solution (1 to 400 of acid) were given every third day, also six times daily orally. The wound was cleansed and packed with boric acid every three hours. On the fifth day improvement was noted; then boric acid was added to the acid mineral treatment both by vein and orally, and healing took place. October 10, 1934, this woman was in good health, had gained fourteen pounds in weight, the scar had become keloidal, the infected axillary gland hard to find. It seemed at that date, the addition of the boric acid to the treatment would be able to prevent relapse. By December, 1934, this hope was dispelled. A recurrent growth appeared, not in scar but in that part of incision over sternum that had healed before the boric acid was applied to incision. By March, 1935, this recurrent growth had increased to the size of a small apple. She returned to the hospital and the tumor was stripped from the surface of the fascia above the sternum. This time the boric acid powder was freely applied before stitches were taken. Also after. She returned home the same day and the wound, although pulling apart by tension of skin, healed readily by above treatment. In place, however, of boric acid in solution, another acid later to be written of was given her orally and at this date, April, 1935, this woman is in good health, although in dire poverty. The indurated glands remain quiescent, the septic tooth is still in lower jaw. She has gained weight, and digestion is perfect. This highly malignant cancer at thirty-six years of age rather indicates that the removal of ovaries eight years before, predisposed her to cancer invasion.

Before telling of this present medical solution that is in the author's practice so uniformly satisfactory in cancerous disease, let us briefly review the biochemical conclusions of Dr. Ellice McDonald as given in the first part of this chapter and see whether the remedy discussed is in conformity with his conclusions, and, if so, how the formula can produce curative results. Dr. McDonald states that in contrast to normal cells "there is a defect in the oxidation processes, and a larger production of lactic acid." That this lactic acid of cancer cell

production, and its reduction to glycogen and carbonic acid as in normal tissues, is interfered with or impossible by the oxidative power of the blood through lack of oxygen in the cancer tissues is the conclusion of many research biologists. Therefore, as this increased production of cancerous lactic acid must be neutralized, the basic sodium in the blood supply is necessarily called upon for this purpose. This union of sodium and lactic acid would necessarily form sodium lactate, an alkaline salt.

The presence of this alkaline salt in the circulation can create the well recognized pH value called alkalosis; also the high pH value of the serous discharges from cancer lesions, pH 7.8, as found by the writer. Dr. E. McDonald goes on to say, "The nature of the injury to the oxidative processes of the cells is the most significant fact of present day cancer research." The above statement bears out the explanation given by the author—deficiency of oxygen, excessive formation of lactic acid, and the reduction of this acid to an alkaline salt. In malignant cancer tissues we have a vicious cycle established. To neutralize the excess lactic acid a free copious blood supply, containing sodium ions, is required. This need may be the reason for the increase of blood vessels so characteristic of malignant neoplasms. By an increased blood supply there is necessarily an increase of the hyperglycemic blood; or, in simple language, an increase of blood containing an excess of sugar, glucose or glycogen. These words are synonymous so far as cancer is concerned. The more the cancer lactic acid is increased, the greater the need of free sodium or other mineral bases to neutralize this acid, and growth becomes progressively accelerated. As before explained in the chapter on calcium, if an alkaline or even an acid calcium salt is given grave results ensue, as the alkalosis is thereby increased.

The next quotation brings us to the point. "The repair of this injury, and the production of a more oxidizing potential, gives hope of transforming the cancer cell back to a normal chemical metabolism."

The question arises, can this be done? Also, has the author been able to produce such a change in his cancer patients? All the writer can do is to explain his theory, give



the formula, and relate results in cancer patients, then leave it to his readers to test out this method on their own cases. Only by clinical observations can any theory, method and conclusions be proven. Any other method is futile and foolish, such as in the wholesale and professional condemnation that appeared when intravenous injections of hydrochloric acid solution for asthma and septic conditions were first promulgated as described in a previous chapter.

Those who have read the previous work can call to mind how the author, to combat the impaired oxidative metabolism in his cancer cases, administered boracic acid combined with hydrochloric acid and potassium salts. This addition materially helped for a while by raising an immunity against cancer growth; but, like many other remedies, failed to bring about the changes necessary, and growth recurred. In another case the potassium and boron salts, seemingly, caused a breaking down and dissolution of cancerous cells. Such a process may be quite helpful in cases of slight invasion but is most destructive when lesions involve mouth, bones, or when the patient's metabolism is overwhelmed in advanced cancerous disease.

An N./10 solution of boric acid has only a slight degree of acidity, pH 5.2; it does not enter into the metabolism of the tissues, and is probably eliminated, unchanged, by the kidneys and intestines; and, although it is a feeble antiseptic, it may produce in time an acute nephritis if given in large doses.

A solution of benzoic acid was finally used in place of boric acid. The author gives it by vein and by mouth and, so far, nothing but good results have followed its administration. An N./10 solution of benzoic acid has a pH value of 3.1 over a hundred times more acid than boric acid. It, unlike boric acid, is combined with glycoll during the first twelve hours and is excreted in the urine as hippuric acid. It is an active germicide and fungicide and, therefore, is helpful in raising the normal immunity against invading microorganisms so constantly present in all advanced diseased conditions. Benzoic acid is found combined in such foods as plums, prunes and cranberries. Therefore, if the author's conclusions are correct, these fruits should be eaten by cancerous victims.




As benzoic acid is given to lower the pH reaction of the tissues, it must be given in an acid solution and not combined with a base such as sodium and potassium. Wood reports that if it is given as a benzoate of sodium, it is still able to increase acidity of the urine. Benzoic acid is much used in urinary diseases to destroy bacteria and to remedy an ammoniacal urine. Let us see what it has done in the writer's hands in cancer cases.

This remedy was given in the case quoted of recurrent malignant breast carcinoma, after the second operation. The enlarged glands were left untouched. This patient six weeks after the operation, although almost starved by poverty and lack of work, has gained weight, the glands are becoming smaller, and she feels in the best of health.

Case of G. D., female, aged sixty-eight years (Jacksonville, Fla.). Has not stopped work even for treatment. One year ago, while smelling from a bottle of ammonia solution, tipped up bottle too far and the solution ran down her nostrils. Three months later nose blocked up, also ears, and a sore place appeared in soft palate and roof of mouth. She was put on the acid potassium solution and improved for a while; then two months ago a hole the size of a pencil formed above uvula. It grew larger and treatment was changed to the acid benzoic solution. Today she has improved, her eustachian tubes are clearing up and hole in uvula has diminished in size, and difficulty in swallowing has almost disappeared. A later examination shows that the woman has also a cancerous growth in the duodenum. (At this time, three months later, the lesion has healed.)

Case 3, Mrs. R. C., aged forty-seven years, Jacksonville, March 3, 1934, growth found in her left breast. At that time her weight was 183 pounds. A radical operation was performed on July 9, 1934. After operation her weight was 155 lbs. Was first seen by the author March 3, 1935. She reported constant severe pains in left side during day. Indurated glands the size of large shot were palpable between ribs and in supra-clavicular space. Left shoulder swollen, function much decreased, indicating a lymph stasis; no enlarged glands in axilla; tired, weak, unable to do her housework; in bed mostly all day; weight 143 pounds. Treatment:



An intravenous injection of acid mineral solution, one to 600, 10 cc., once weekly. Acid benzoic solution, 15 drops, well diluted, 6 times daily. April 21, 1935, much improved, the gland induration has disappeared, shoulder less swollen, can now use her left arm freely, has gained weight, and does all her housework. Quite a different woman in appearance; pain has practically disappeared. No other treatment has been given her. Several other cases are under treatment, all doing well, and these will be reported later.

Does this acid benzoic solution fulfill the requirements outlined by Dr. Ellice McDonald? Time, alone, will tell. Benzoic acid has long been known to be capable of increasing the acidity of the tissues. It is germicidal, non-poisonous in small doses, combines with the food, is assimilated, does its work, then is finally eliminated by kidneys recombined as hippuric acid; is always present in urine of cattle living on vegetable food. As used by the writer it is dissolved in alcohol, then a solution of silicic acid in dilute hydrochloric acid is added to it. The full formula is given with others in a later chapter.

### *Summary*

1. Increase of lactic acid in cancer is 5 to 20 times that of normal.
2. There is little or no recovery of glycogen from lactic acid in cancer.
3. Formation of sodium lactate, pH 9.2, causes the recognized alkalosis in cancer.
4. The pH of the blood in cancer is higher by an average of 18.2 per cent.
5. Blood in cancer contains 20% more glucose than normal.
6. The more alkaline the blood the more rapidly cancer advances, and shorter the duration of life.
7. The greater the glucose content in the blood, the greater the number of mitosis or cell reproduction.
8. Benzoic acid solution, having a ten thousand times greater acidity than pure water and entering into the metab-

olic processes of the body, is more effective in destroying a cancer alkalosis.

9. Benzoic acid is non-poisonous and increases immunity against septic invasion.

10. Potassium, after its need is supplied, becomes harmful in advanced cancerous disease.

11. Benzoic acid, to date, when combined with dilute hydrochloric acid, appears to be the agent that produces uniformly curative results.

12. All cancer tissue should be removed or destroyed whenever possible.

## CHAPTER XXII

### ACID MINERAL FORMULAE

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The acid mineral solution is a very flexible compound for it can be modified at will to suit the requirements of any variety of cases. The main purpose of the dilute hydrochloric acid is not, as some erroneously assume, to change the pH values of human tissues. This is practically impossible by this acid, alone, for the buffer salts in the blood and tissues immediately absorb the hydrogen ions in the solution, no matter whether it is given by vein, muscles or mouth.

Nevertheless, this acid solution does give off free chlorine and hydrogen ions that play an important part in revitalizing cells, they stimulate phagocytosis, increase the hemoglobin content, dissolve precipitated salts, break down toxins and eliminate waste acids; the chlorine ions tend to destroy microbic life and increase the immunizing properties of the blood.

By supplying potassium salts, however, the gastric secretion of hydrochloric acid is increased when deficient; also stimulation and nutrition of all the tissues take place, particularly the cardiac muscles, the endocrine glands, and the nerve centers of the body, as seen by the many cases treated.

The action of the potassium salts, however, varies according to their chemical composition. As quoted before, the chloride seems to increase the water content of the tissues as seen in tobacco culture, and should not be used in dropsical or obese people. The potassium sulphate radical,  $\text{SO}_4$  is not split by the body metabolism, but when the potassium ion is absorbed this radical unites with other bases such as calcium and sodium and is eliminated as sulphates from the body. This makes it possible, by substitution, to eliminate calcium magnesium or sodium, when in excess, as these bases are antagonistic to potassium and replace it when deficiency of this metal is present, as previously described; therefore, potassium sulphate is best adapted for stout, watery tissues, and the chloride for thin and emaciated persons.

To prepare silicic acid for the given formula, take one ounce of water glass ( $\text{Na}_2\text{SiO}_3$ ), add dilute hydrochloric acid to precipitation. Wash precipitate in water, and add it to hydrochloric acid c.p. Then dilute this acid to make the U.S.P. official dilute hydrochloric acid. Only a trace is dissolved, yet the writer believes it to be sufficient for a therapeutic effect.

Arsenicum is used, as Fowler's solution, for its tonic action on the blood-making tissues. Any of these minerals can be added or left out, as indications demand. As mentioned in the chapter on ferrum, iron can be added if it seems desirable, though it is not indicated in senile diseases, but only for young, anemic or tuberculous children. The iron preparation used is the official tincture of ferric chloride.

The silica is used for constipation, ulcers, alopecia and bone diseases, or in old age to prevent bone fracture. The potassium salts are contra-indicated in advanced cancer cases.

Iodine may also be added if needed. The preparation used is Burnham's soluble iodine 8 cc. to a 120 cc. mixture. This iodine becomes very active when given in conjunction with hydrochloric acid and has seemed to act favorably in calculi of the kidneys, also in tuberculosis of the same organs, and is helpful to cause resolution in inflammations; also in sarcoma.

Corrosive sublimate or mercuric chloride is also advantageous in syphilis but it must ever be remembered that calomel or mercurous chloride should never be given while patient is taking the acid mineral solution, as the increased hydrochloric acid of the stomach may change it into corrosive sublimate with poisonous results.

Before describing our formula the author wishes to show how hydrochloric acid can be used advantageously in other formulae. Here in Florida we see, especially in October and November, cases of malaria, probably of the autumnal type. The following prescription is exceedingly valuable in this disease:

Rx. Acid hydrochloric dilute, U.S.P.,	8 cc.
Solution Donovan,	4 cc.
Tincture Warburg's with aloes,	
Q.s. adde,	120 cc.



M. et Sig. take one teaspoonful in water  
six times daily.

Again syphilis is frequently met with; if injections of bismuth compound later to be described are not in order, this formula may be prescribed. It is especially valuable in chronic cases and in aged people with arthritis:

Rx. Acid hydrochloric dilute U. S. P., 8 cc.

Corrosive sublimate, 0.06 Gm.

Syrup trifolium comp. Q.s. adde, 120 cc.

M. et Sig.: Take one teaspoonful diluted  
three to six times daily.

The above prescription contains potassium iodide; the addition of the acid tends to ionize the potassium and iodine and makes them quite active. It has been found quite helpful in all stages of syphilis. If, however, mercury is not indicated by reason of nephritis or non-infection of syphilis, the mercury may be omitted from this prescription.

The well known mixed treatment tablets are most useful for cases of suspected syphilis; this formula enables the writer to diagnose such cases as it soon produces gastric disturbances if syphilis is not present. Also this tablet is quite helpful when given in conjunction with the bismuth compound injections. When the acid mineral solution is given at the same time, very good results are obtained. The formula is as follows:

Mercury bichloride, 1/64 gr.

Potassium iodide, 2 gr.

Syrup ferri iodide, 5 m.

Donovan's solution, 2 m.

Tr. Nux Vomica, 3 m.

Hydrochloric acid is used intravenously in strengths varying from one part in 250 to one part to 1500; and this acid, alone, often gives most brilliant results. The author invariably adds potassium salts to it; its action is not changed but results are more permanent. If the gastric acid secretion can be made normal, nature can correct an alkalosis if present, provided an excessive alkaline water supply in diet is eliminated. When feasible the acid mineral solution should be administered in distilled or rain water.

Leaving out the tincture of iron the formula is as follows:

Solution of potassium arsenitis, (Fowler's) 1 %, 24 cc.  
 Potassium sulphate (powder) and  
 Potassium chloride, a. a., 18 Gm.  
 Acid hydrochloric dilute U.S.P., 120 cc.  
 Aqua distilled, Q.s. adde, 500 cc.  
 M. Color verde—dispense in 1 oz. bottles.  
 Sig.: Take 5 to 25 drops in distilled water  
 three to six times daily.

If iron is required add tincture ferri chloridi 12 cc. to the above formula.

If silicic acid is indicated, prepare the dilute hydrochloric acid as before described.

The author has discarded the arsenicals or arsphenamines altogether, getting better, quicker, and more lasting therapeutic action by bismuth sub-salicylate combined with a trace of iodine and naphthaline.

For three years, we have made our own bismuth preparation by taking light weight mineral oil, cooking into it 4 grammes of naphthaline to 90 cc. of oil. To this 5 minims of a saturated solution of iodine in chloroform is added. This formula constitutes the naphthaline oil that Dr. D. de Beszedits has found so specific in erysipelas and other septic infections when applied to lesions as a compress.

To make the bismuth formula, add one grain of bismuth sub-salicylate powder to each cubic centimeter of the mineral oil compound as above described. The mixture must be well ground together in a mortar and strained. It is put into a glass-stoppered jar containing glass beads to accelerate mixing when shaken. Dose, intramuscularly, 1 cc.

In malignant disease the following formula is used; so far most gratifying results are reported with no bad results. To recapitulate: To obtain results in cancer by biochemical measures we must have a remedy that increases the acidity of tissues, cuts down excess sugar content of blood, is harmless, antagonistic to microbic life, and must be assimilated and excreted by the metabolism of the tissues. So far, the following formula, seemingly, fulfills these requirements. It can be given orally, and by vein, when diluted. The writer feels that larger doses than he uses may be still more helpful, but experi-

ence of others can alone determine the most effective dosage. Also when diluted it may be applied directly to cancerous lesions if on outside of the body.

Rx. Acidi benzoic,	10 Gm.
Alcohol, 95 %,	90 cc.
Saturated solution of acid	
Silicic in acid hydrochloric dilute,	
U.S.P., color rubrum, Q.s. adde,	120 cc.
Dose: Give 15 drops in 8 oz. distilled	
water 3 to 5 times daily.	

To make an intravenous solution add 4 cc. to boiled or triple distilled water q.s. ad. 120 cc. The silicic acid should not be added to mixture for intravenous use. The solution is best prepared by a reliable laboratory. For emergency, boiled distilled water may be used with 3 drops of phenol added to sterilize the solution.

The above formula for oral administration may be diluted for local application. For use as a spray as in throat cancer, it is not diluted.

### *Summary*

These varied formulae have many uses and, as the physician keeps in mind the possibility of a lymph blockage causing the symptoms in degenerative disease, he will find that many ways of applying these remedies will become evident. For instance, in progressive catarrhal deafness so apparently hopeless in many, especially in advanced years, the acid mineral formula may be given, also applied diluted locally into the ears to dissolve accretions on drum and the ossicles in middle ear. It has been used successfully when applied locally to cancerous lesions of face. Many chronic ulcers are due to an alkalosis and lymph stasis, as are also chronic cases of arthritis. This is doubtless why in years gone by, blistering was helpful to stimulate the lymph circulation and drain off excess of fluid. Likewise, the old time setons, still used in some countries in treatment of chronic syphilis.

These formulae are inexpensive, easily obtainable, and contain no secret formula or synthetic coal tar product. They are based on scientific principles and biochemical laws. As

they are studied and appreciated, they will aid the medical profession to return to simplicity, to gain a better appreciation of the old time therapy, and free itself from the domination of commercialized drug syndicates that put out a new synthetic drug seemingly every week, lining the doctors' and druggists' shelves with these expensive transitory remedies, flooding the mails with mendacious literature, and creating addicts of many varieties and kinds.

The acid mineral therapy can destroy and also eliminate toxins, aid in repair of impaired organs and add to the action of any established specific therapy, such as quinine in malaria. Most all of the synthetic coal tar products can be relegated to a well-merited oblivion, as advised by Dr. Oliver Wendell Holmes, who said that "if all drugs were thrown into the sea it would be better for men, but bad for the fishes."

## CHAPTER XXIII

### CLINICAL REPORTS

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The following was taken from an article by Dr. William I. Howell of Lexington, Tenn., published in the *Medical World* of June, 1933.

Thirty-two years of general practice in a small town without the resources of laboratory, made me often wish I might live and work in a larger community, where I might have more assistance with many of my cases. Drugs, as I had been taught to use them in the treatment of infections that came under my observation, did not have the effect on my patients promised by my studies of *materia medica*.

In 1931 I saw two reports in print. One was in a Memphis newspaper reporting that in America the year before there had been some 16,000 deaths of women in childbirth. This was startling to me, and a shock. For, no doubt, many of these women had died from infection, and while I had just spent the better part of a week at a most interesting meeting, not a word had I heard about what to do for childbirth fever. Then I saw the other report, just spoken of, in *Clinical Medicine and Surgery*, on the treatment of pyogenic infections, by Dr. Burr Ferguson. The clinical results he said he had seen seemed unusual in that he seemed not to rely at all on any local application of germicides. Dr. Ferguson's claims, that nature was responsible for the good results through the induced activity of the white blood cells following the injection of hydrochloric acid solutions intravenously, fell in with my own belief that nature was the best doctor.

On August 18, 1931, I found the case for the use of the hydrochloric acid. Five days before this date I had delivered this girl of 15, after a prolonged and most difficult labor, using all possible septic precautions permissible in a log cabin in the woods. The large baby lived only two hours. In spite of the small size of the mother (she weighed only 90 pounds), lacerations were apparently small in size. Three days after the delivery a message was sent me that she had had a chill



and a very high fever. It was a long distance to that river bottom where she lived; so in the hope that it was malaria I sent quinine and calomel.

On the fifth day another message came, telling me of the grave condition of the patient and that my immediate presence was necessary. On going into the sickroom I at once saw there had been no mistake in this urgent message. The little girl was delirious; temperature,  $106^{\circ}$ ; pulse, 140; respiration, 40; discharge from the vagina scanty and fetid in odor. Every other case I had ever seen in the condition in which I found her is dead.

With much trepidation I gave her 10 cubic centimeters 1 to 1500 hydrochloric acid. The following minutes were anxious ones for me, as I hardly knew what to expect, as this was the first time I had ever heard of the acid being used in puerperal sepsis. The reports that I had seen of Dr. Ferguson's cases of pyogenic infections were of gunshot or lacerated wounds. As I sat by that bed, holding the radial pulse in that lowly log cabin, a flood of memories of teachings concerning the fatal consequences of injections of acid into the veins came over me. While in this frame of mind I noticed sweat on the neck and forehead of the patient, and along with it a slowing of the pulse and in a few minutes more she was bathed in a profuse perspiration. With it there was a cessation of the chatter of her delirium.

Thirty minutes after the injection of the acid I asked her how she felt. She replied that she felt much better and would like to go to sleep. Within the hour the temperature was 103; pulse 100; respiration 22.

During the following four days I repeated the injection of the acid each day, and on the fifth day temperature was 99; pulse 72; respiration, 18. Two days thereafter I was called again, as I was told the fever had returned. Found her with a temperature of 101, with a free discharge from the vagina. I gave her another injection as before. Save from weakness, all evidences of infection had disappeared the next day, and she went on to an uneventful recovery with a complete disappearance of the mass in the left iliac region.

This case seemed unusual to me because no local treatment or douches were used and all of the foregoing clinical

changes took place under my own eyes, during the first visit, with absolutely no other treatment than the injection of the acid.

On October 10, 1931, I was called in consultation to a case of eclampsia. The patient was a primipara, and in a forceps delivery there was a small laceration. On the third day she had a hard chill and fever, and again I was called by the attending physician. I advised the injection of hydrochloric acid intravenously. The physician in charge refused to have the patient subjected to such a procedure. After a more or less heated discussion I was forced to agree to the injection of one cubic centimeter of a mixed infection vaccine.

On the following day the patient was much worse; temperature, 105, pulse 130; respiration 30; delirious and very restless; large mass easily felt in pelvis. My colleague then said: "It looks to me as if death is inevitable, whatever we do; so you might try an injection of that damn acid." I gave the injection and witnessed the same clinical changes that I had seen in the other case just reported. Three days more and I was called again and found the patient with temperature 104, but she was not delirious and the mass in the pelvis was much smaller. Two other injections were given on the following days, after which she went on to an uneventful recovery. This woman has continued in good health and will be again confined in a few weeks. So nothing but good seems to have followed the injection of the acid.

In January, 1932, I was called to see a mother nursing a ten-months-old child. Found her with a temperature of 96, generalized pains in her body and legs, pulse rapid and weak, breathing shallow. There was a discharge from a ruptured infection on the last phalanx of the middle finger. A deep ulcerlike infection on the upper half of right breast, about the size of a quarter. Gave her an injection of hydrochloric acid, as in the other cases. The next day there was a much more profuse discharge from both lesions and after the second injection she went on to an uneventful recovery.

In August, 1932, I was called by Dr. H. L. Wylie, of Scott's Mill, to see a woman evidently septic, having had chills, fever and prostration for several days. There was an ulcerlike lesion on the last phalanx of a finger, edges ragged,

blisterlike lesions over forearm. Gland above elbow and axilla much swollen and tender. Diagnosis of tularemia was made and the use of hydrochloric acid advised. I failed in my efforts to give an intravenous injection because of the very small size of her veins; so I gave her intramuscular injections of 3 cc., of 1 to 500 hydrochloric acid every day for ten days, using alternate hips. At this time all evidences of the infection had disappeared. There has been no return of the infection. ✓

Since that time Dr. Wylie has told me he had another case of tularemia which he treated in the same way, except that he used the intravenous injection and that the result was like that in the case I saw with him.

A banker in a nearby town came to me with the only carbuncle I ever saw on the upper lip. There were draining sinuses over lip and left side of nose. Pain was being controlled by morphine. Six daily intravenous injections were used in this case, with the same good results I had witnessed in the other cases in which I had used the acid injections.

During the summer of 1932, I had the opportunity to see a woman of 35, the mother of 5 children, three weeks after a severe hemorrhage from the lungs. Temperature 103; rapid pulse, and exhausting night sweats. Pulmonary tuberculosis in both lungs. Weakness and emaciation made the prognosis rather hopeless. Since Ferguson had reported that the injection of hydrochloric acid made the polynuclear cells attack the tubercle in a way that is not done in nature, I decided to try the same injection I had used in the preceding cases. ✓

I advised absolute rest in bed and mineral oil for her bowels and began the injections of hydrochloric acid, 1 to 1500, three times a week. As the days passed her appetite began to improve, and I ordered a diet of fruits, vegetables and what meat she felt she could digest. The improvement was most satisfactory and within one month was free from fever. In three and a half months she went from 95 to 110 pounds in weight. She had a comfortable winter and has been able to move about the house since early in the year, after fifty injections of the acid. Early in March just past I began another ✓

series of the acid injections, which I shall continue during the spring and summer.

In the autumn I was called to see a man of 30, a farmer whose mother had died some time before with tuberculosis of the lungs. He, too, had just had a hemorrhage from the lungs, and his history and condition were typical of pulmonary tuberculosis. He decided to go to Memphis for treatment, but after six weeks he returned, saying that he had had the rest-in-bed treatment and he might have that at home just as well. Soon after his return, when he was running an evening temperature of about  $101^{\circ}$ , he began to have painful urination. Specimen of urine was cloudy and well colored with red blood.

✓ After the first injection of the acid, 1 to 1500, there was a most pronounced chill, but the following fever was no greater than his daily temperature. For a few following injections of the acid I decreased the strength to 1 to 2000. There were no further reactions, so I again returned to the injections of the 1 to 1500 solution. After a month there was no more discomfort on urination and the specimens were pretty well clear. With the freedom from fever and an improving appetite he began to increase slowly in weight; so I  
+ increased the strength of the acid solution to 1 to 1000, which I am giving three times a week. He continues to eat and sleep well and I shall continue the injections of the acid for a few weeks.

In the fall of 1932, after a coryza, my grandson, a robust lad of 6, complained of a pain over the lower lobe of right lung. Rapid onset of fever. Within two days the lower lobe was consolidated. Light diet, attention to elimination and an occasional mustard plaster over infected lobe was the only treatment used. In spite of the fact that I had seen no untoward consequences following the use of the acid, I feared to give it to one so young. Crisis came on the sixth day, after which he was free from fever for two days, when it returned with this relapse, quickly going to  $102^{\circ}$ ; pulse 120. Fearful of an abscess, I determined to give the hydrochloric acid, giving 3 cc. of 1 to 500 deep in pectoral muscle. There was an improvement in his condition for the following 24 hours, when his temperature was  $101^{\circ}$ , pulse and respiration much lower. J I gave another injection, as on the day before, under the pec-



toral muscle of the other side. Fever was normal the next day, and after a convalescence of two weeks, returned to school, where his attendance has been regular since the illness.

Confirming the observations of Dr. C. D. W. Colby, of Asheville, of the effect of the acid injections on asthma and other manifestations of the allergies, about a year ago a young married woman came to me complaining of intense itching over her body, sometimes in one area, sometimes in another. The elevations on her skin on this visit seemed to be an urticaria. She said she had taken and done everything advised by her doctor and friends, but the itching persisted. Six injections of the acid 1 to 1500 were given every other day. Improvement was noticeable after the first injection and she was wholly well after the last injection.

In the summer of 1932 I saw a baby with a severe case of colitis, frequent vomiting, abdomen much swollen, delirious, with temperature 104. I tried all manner of recognized plans for treatment, but the foul smelling, frequent stools continued. I had been taught that such conditions were the result of acidosis and it seemed to be going too far to give more acid. But since all other measures had failed in giving relief, I determined to give the acid in the gluteal muscle just as I had done with my grandson. Injections were given daily. Improvement in the general condition of the child was noticeable, abdomen rapidly flattened out, fever became lower and on the third day there was a marked change in the quality of the stools. Six injections of the acid were given, after which the child made a rapid convalescence and has continued in good health.

In November last I had an acute tonsillitis of my own; temperature 102; tonsils much swollen; whitish patches over each one. Not being able to give myself the hydrochloric acid, I took calomel, aconite, gargles and painted the throat with nitrate of silver. Since I had no improvement I called Dr. J. F. Godd, asking him to give me an intravenous injection of hydrochloric acid. He demurred, saying that it was against all reason to give an acid in the veins. On my insistence, however, the injection was given. Improvement was rapid during the following hours, had a good night and the



next day my temperature was normal. I returned to my office in the afternoon.

In every case where I have a laceration in a confinement case I give before I leave the house a shot of 10 cc. of 1 to 1500 HCl in the vein, with 100% results, without fever following. Before I began this practice I was having fever once in a while of a septic nature. In cuts or lacerations of any kind I give the acid as stated above; it prevents infection.

Clinically I know hydrochloric acid injections will be followed by good results in the greater number of infections. If the cellular and clinical claims are untrue or true it seems to me it might easily be disproved or proved in a well-equipped laboratory. In conclusion, I can only say that I am grateful to Dr. Burr Ferguson.

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Clinical experiences such as I have never known before are frequent in the application of this idea that nature is the best doctor, through the injection of this basic acid of the body. While this paper was being copied, on the 24th of April, I had the opportunity of seeing two cases whose behavior under the influence of the acid-stimulated cells seems worthwhile. One was a lobar pneumonia and the other a pyogenic blood-stream infection.

On April 23rd a boy of 15 had a prolonged chill, with an intense pain in right side. I saw him the next morning with a temperature 104; pulse 120; respiration 36; cough and expectoration of rusty mucus and pus. Lower lobe consolidated.

Hydrochloric acid, 1 to 1500, 10 cubic centimeters, was given intravenously. Twenty-four hours later temperature was 101; pulse 90; respiration 24; profuse expectoration and the patient comfortable. Another injection of the acid was given. I failed to see the boy on the following day because of a call in another district. On the fourth day I was much pleased to find the temperature normal, yellowish sputum, free from pain and a most encouraging appetite.

A week ago an employee in a sawmill had a lacerated wound in the right leg from a fall of lumber. I cleaned and dressed the wound, using mercurochrome. In three days the

temperature was 104; pulse 130; intense pain in infected wound. Several small incisions were made from which there was an exudate of a small amount of bloody pus. Following the intravenous injection of 10 cc. of 1 to 1500 HCl there was a profuse sweat within the hour, after which there was another pronounced chill, but no increase in the temperature. The next day temperature was 102; pulse 100; and the patient was much more comfortable. The discharge from the wound was much more profuse than one sees when the case of such lesions is left altogether to nature. One required no microscope to know that there had been a great stimulation in numbers and activity of the white blood cells.

Another injection of the acid was given and on the following day the patient was much better, with a normal temperature. Another injection of the acid was given in order that the very active repair of the wound might be continuous.—Burr Ferguson.

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The Healing of Wounds  
By Burr Ferguson, M. D.  
(in *Monthly Clinic*)

This is in answer to E. B., in *Monthly Clinic* in March *World*: Like you, I am often puzzled over the clinical effects of the injections of HCl. I have had, of course, a few cases of ulcers of the duodenum and the pylorus, one of the former having been of 22 years' duration. X-ray showed active lesion. Gave her ten injections of HCl, 1 to 1500, and she was clinically well. Three years thereafter a study was made of the intestinal tract, and showed nothing but scar tissue at the site of the old lesion. This patient was 73 years old when I gave her the acid injections and is in good condition now at 78.

The white cells are the essential factor in the healing of wounds, and I think on the chemical side the good effects you and I have seen come from a glandular and cellular stimulation by the HCl, so making these factors in the production of the acid return to its normal production.

I agree with you on the difficulties in understanding these phenomena, but if it is good for a sick man it pleases me to

give it, whether I understand all of its manifold peculiarities or not. Try it on the secondary anemias and you will be still more puzzled.

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We quote the following taken from an article on "Hydrochloric Acid" by Dr. Burr Ferguson, of Birmingham, Ala.

After several years of clinical and cellular observation of the effects following the injection of hydrochloric acid, 1-1500, I became convinced that a marked degree of activity was added to the white blood cells by the acid. Having seen so few inflammatory reactions, I determined to increase the strength of the solution. The cooperation of a local veterinarian, Dr. K. U. Jones, was readily given.

Seven dogs were taken with a wide variety of pyogenic infections of the skin. One case of chorea and three apparently normal animals. These dogs varied in weight from 45 to 60 pounds. Under the constant observation of Dr. Jones and occasionally Dr. John Edmondson, a local roentgenologist, 10 cc. of 10% hydrochloric acid were given every day to each dog for seven days. No inflammatory reactions followed the injection of the strong solution of the acid were noted by Dr. Jones. The dogs all improved clinically and within two weeks after the seventh injection to the dog with chorea, he was sold as a sound dog. The only disagreeable incident in this series of injections occurred when a few drops of the solution, through an error of technic, was put in the tissue surrounding the site of the injection, after which the leg was much swollen and required several days for its return to normal. The occlusion of several veins, of course, followed this injection, but no ultimate harm seemed to have been done.

With this observation it was suggested that Dr. Jones use the acid solution in the treatment of a herd of cows on a dairy farm, with mastitis and the accompanying high bacterial count, and with occasional abortions in this herd. Immediately Dr. Jones began the injection of 100 to 125 cc. of 1-200 to 1-1500 solution of hydrochloric acid.

In the first series of about 30 cows, Dr. Jones gave from 12 to 15 injections of the solution as above. Three of the cows had no benefit and were destroyed. The others all re-

covered and went back to the dairy farm. Since this time Dr. Jones has used the same plan of treatment in 20 other cows. He reports that there have been no abortions in the cows so treated. These clinical determinations were done under the observation of Dr. B. H. Moon, of the City Health Department.

Since this time I have used solutions of the acid in the treatment of all manner of infections from syphilis to acute coryza in a strength not stronger than 1-200 of the U.S.P. hydrochloric acid. I have frequently taken stronger solutions myself and find that using 1% or stronger, the pain at the site of the injection is not pleasant. So I rarely now use solutions stronger than 1-200.

The white blood cells are acid in reaction (1), and since hydrochloric acid is the only inorganic acid of the body, we must attribute that acidity to the hydrochloric and its injection directly into the blood stream heightens very much the phagocytic activity as reported in the *Medical World* of May, '33. The following clinical experiences in the use of the stronger solutions of the acid illustrate apparently the effect clinically.

I maintain that the human body shows many abnormal variations because of the presence of germs. Also that this body has everything for successful resistance to this hostile presence, and that if the germs are eliminated the body also has everything for the correction of the variations from the normal, caused by the invading microorganisms.

Since no theory of resistance is of the slightest value unless it may have an immediate clinical application, I shall report three conventional cases, such cases as may be seen almost every day in an active medical practice. One of anemia and two cases of stomach disorder, one with too much acid and the other with a marked lack of this essential factor in the stomach and body. All three cases having widely differing manifestations, and all caused by microbic invasion.

The first case was a boy of 6 years of age, a listless irritable child, whose appetite had never been normal and the accompanying anemia had been life long. He was said to have been under almost continuous observation of pediatricians in Minneapolis or in Birmingham for the six years of his life. I



shall not attempt to recount the variations on the prescribed diets and tonics nor the long report of the failure of the abdominal binder or support in the correction of his ailments. Suffice it is to say the mother seemed to attribute his condition to her ill health, including the removal of an ovarian tumor during her pregnancy, so explaining the failure of all plans of treatment so far used.

In my examination of this pale, restless and inattentive child, I could see nothing to connect his condition with any pre-natal influence. No indication of any focus of infection could be found, but the child was constipated. The white count of 9000 to the cubic millimeter I took to indicate the presence of germs or poisons of some kind. The red count of 3,470,000 per cubic millimeter left one in no doubt of the truth of the diagnosis of anemia.

✓ I gave him ten cubic centimeters of hydrochloric acid U.S.P. 1-500. There was no inflammatory reaction. The mother reported the next day a most comfortable night's sleep for the boy and that he had not awakened until ten o'clock on the following morning, with his restlessness much abated. When he was brought to me forty-eight hours after the first visit I was told that the night before the lad had been taken to a cafe and ordered what he liked, which was in compliance with my suggestions for a liberal diet. By which I meant anything that he most wanted to eat. A full well balanced meal was ordered and his mother said that for the first time in his life he had eaten such a meal completely.

✓ Seven injections of the hydrochloric acid 1-500 were given. Clinical progress was steady and both the red and white counts soon returned to normal as is shown in the following copy of his card. The count of 7000, seven days after the first injection of the acid, would seem to indicate that the germs, if any, had been eliminated or the poison neutralized by this stimulated cellular activities and the modification of the pathologic variation from the acid base balance.

E. C. T. 6

14 June, 1933—	White cells, 9000; red cells, 3,470,000
20 June, 1933—	White cells, 7000; red cells, 4,060,000
28 June, 1933—	White cells, red cells, 4,520,000
9 July, 1933—	White cells, red cells, 4,530,000



On July 9, when the last count was made the visit was purely for observation and the writer was much pleased to see a good color, which had formerly been noticeably pale, and an increase of four pounds in weight.

The behavior of this case would indicate that the anemia was caused by germs and that their elimination had followed the phagocytic activity induced by seven intravenous injections of hydrochloric acid. Also that when the inhibitory influence of the organisms was removed the body, ailing for six years, quickly returned to normal.

By contrast, the next case was some 71 years older than the lad just reported. I saw the old man first on July 11, 1932. His complaint was jaundice and stomach disorders, due to the very small amount of hydrochloric acid. Three years before his visit to me, he had been to one of our best known diagnosticians, who after a most thorough X-ray, chemical and clinical examinations, spreading over a week, made a diagnosis of an infection of the gall bladder and deficient hydrochloric acid in the stomach content. For the correction of which hydrochloric acid ninety to one-hundred and twenty drops a day was prescribed. Also a vegetable diet.

My cursory examination confirmed my belief in the correctness of the diagnosis of my learned colleague. So to my regret now no counts were done. The anemia and the jaundice were most evident and required no microscopic examination for their confirmation.

I determined to attempt the removal of the jaundice by a stimulation of the cellular and glandular forces of resistance by an injection every other day of hydrochloric acid 1-500, just as I had used in the little boy. It seemed to me that both the jaundice and the deficiency in the hydrochloric acid of the stomach were caused by the germs in the gall bladder and liver and that if they were eliminated the manifestations of the microbic activities would disappear.

On the second visit, forty-eight hours after the first, there was an improvement in the jaundice and the old man was stronger, and was delighted with his daily portion of meat. On the fourth visit eight days after the first, one had to be very near him to see any yellow discoloration at all and this yellow tinge was in the sclera of his eyes.

After he had received 14 injections of the acid, he was so improved that, in the repair of a kitchen table during which he used a saw and hammer and other tools of a carpenter, he fell and injured his back. However, he continued on the diet, as modified, and the jaundice and the indigestion had not returned eight months after the last injection of the hydrochloric acid. What has happened to him since that time I do not know.

Two weeks ago a travelling man was brought to me. Since the towns in his itinerary were the larger cities of the country, he had been able to have the best opinions and examinations for his malady of indigestion. He said he had had all manner of X-ray examinations, because his most annoying symptom of disorder was a burning sensation in the stomach, and that pretty well all of his advisers were of the opinion at first that it was caused by an ulcer of the duodenum. In spite of the fact that no evidence of the ulcer had ever been found, he said that no new adviser could be convinced of the failure of the other colleagues to find the lesion—hence the many series of plates. Just how great the increase in the stomach's acid was he could not tell me.

Save for reddened lids, a small tumor like a growth on the left lower lid and a sty on the reddened lower lid of the right eye, the patient's appearance was normal enough. However, in questioning him on his observations of himself, I asked him if he had ever been jaundiced. He replied that he was often noticeably tinged with yellow color about his eyes and sometimes in the skin of his face. Since he had a white count of 9650, I at once reached the conclusion that he had too an infection of the gall bladder and the liver. Since almost every adviser that he had, had directed copious amounts of soda of varying kinds, three times a day, and tablets of bile after every meal, the digestion of his vegetable diet was still unsatisfactory and the burning complained of in his stomach was about the same as it was at the beginning of his malady. I rather felt that soda is unsatisfactory for hyperacidity of the stomach.

Since the travelling patient could only be here for sixteen hours after this first visit, I felt that speed would be necessary

for me to see him sufficiently to give suggestions worth while for the future.

So I gave him ten cubic centimeters of hydrochloric acid U.S.P. 1-250, since all my clinical experiences in the use of hydrochloric acid have but strengthened my belief that an excessive alkalinity of the blood is constant in infections and the more acid I give the more consistent seem the results.

It might be very cogently asked why I gave so strong a solution of hydrochloric acid, when the patient was already suffering from too great quantity of this same acid, a quantity so great that soda three times a day for a year had failed to correct it. I did so, because I believed that the invading organisms in the liver were the direct cause of the hyperacidity of the stomach and that if I could diminish the numbers of the invaders by the induced activity of the phagocytes after the acid, there would be an immediate decrease in the acid content. Also since an acid is said to be essential to the most active cellular and glandular activity, I would add that acid to the blood stream with the firm belief, that cells and glands engaged in the production of the acid of the stomach would be stimulated to return to normal activity.

This travelling man is having two injections of hydrochloric acid a week in the towns in which he happens to be, as he carried the ampoules of the solution away from here. I heard from him yesterday after his fifth injection and he reports that his recovery has been uninterrupted. Also that the tumor on the left lower lid, and the styte in the right lid had disappeared.

In closing I cannot refrain from the quotation of a paragraph of a letter just received from Dr. Desiderius de Beszedits, Cayuca de Catalan, Guerrero, Mexico. It is needless for me to express my delight upon the receipt of this letter, since it illustrates so vividly the truth of this cellular hypothesis:

"Every essential thing relating to disease or medicine holds good for man as well as animals and plants; this is my belief. In the months of August and September a severe anthrax epidemic decimated the animal population of this district. One of my friends lost over five hundred head of cattle, young and old. Here we depend almost entirely on our most useful little burro for freight carrying, the poor

man's beast of burden. Very many of these too had succumbed to this disease—anthrax.

"I decided to try the hydrochloric acid solution injections on them as you recommend, using 5, 10, 15 and 20 cc. of a 1-500 solution. I used it injecting both cattle and burros in the neck or hind leg. 10 cc. injections of the same solution I used as a prophylactic.

"No more than six injections were given to any of the sick animals and no more than three as an intended prophylactic dose. None of the so treated animals were taken sick and only one of the 64 animals with anthrax died."

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Following are two reports submitted by T. C. Knox, M. D., Merrill, Iowa, May 8th, 1935.

W. E. S., white, male, age 84 years. Carcinoma of prostate. Channel operation by electric cautery at Mayo Clinic in July, 1934, where diagnosis of cancer was made. Returned home able to void O. K. Within six to seven months difficult urination again prevailed. Increasingly difficult to insert catheter for purpose of irrigation of bladder. Some eight to ten weeks ago I put patient on mineral acid solution gtts XV T. I. D. and he reports that condition is greatly benefited; able to pass urine freely, bladder difficulty apparently cleared, and generally feeling better than for months.

Mrs. J. D. L., age 63 years. Carcinoma of rectum. Operated at La Cross, Wis. General Hospital by Dr. Guy Wakefield in January, 1934. A colostomy done—patient not apprised of true condition. Several months following operation, her husband talked to me about pain in her stomach, distress following intake of food. I thought of a metastasis of the cancer and advised X-rays, but this was refused for financial reasons. I put patient on the acid mineral solution with the iron content and pain and distress promptly cleared up. Patient is pre-operative weight and as active as before her cancer was discovered. Later gave her the acid mineral solution without the iron but her husband tells me she seemed better with the iron content. Have not discussed this case



with the patient, as, so far as we (her husband and I) know, she knows not the true operative findings.

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Many letters have been received by the author, telling of good results by the acid mineral therapy, and as they take up conditions not spoken of in the previous chapters, brief extracts of them are quoted here.

A physician in Maryland writes: Thinking perhaps you would appreciate communications relative to the use of your acid and chloride formula, I am writing to say that I am using it frequently with the most gratifying results. This summer I have had more than the usual number of children's summer diarrheas, and I have been using it in ordinary diarrheas, as well as in enterocolitis, and invariably my patients recover promptly. Recently I had a baby four days old that came down with enteritis, temperature  $103^{\circ}$ , greenish stools, with undigested milk; two drops of the solution every four hours cleaned up the condition in twelve hours.—P. L. G., M. D.

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From New Mexico we received the following extract: I am treating a case of mammary carcinoma. Have been using your acid mineral Rx on her, both intravenously and by mouth; the improvement of the cancer under this treatment has been wonderful . . . Have a case of pellagra, the thought struck me to use this treatment on her; gave her ten drops four times a day. This case cleaned up in about 35 days.—H. P., M. D.

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The following extract from a physician of eighty-four years still in practice in Arkansas is worthy of inclusion, for it demonstrates how readily the acid mineral solution relieves lymphatic congestion in heart muscles and legs. He writes: I have been taking the solution in five to twenty-drop doses for quite a long time, and I tell you, nothing has done so much good as your prescription. I had much swelling and a discolored condition of my legs from my knees down. I could not



control my equilibrium, was fearful of falling, could find no doctor who could diagnose my case. Now, after taking your prescription, my legs are normal and I go with ease wherever I desire. My wife, too, who had a gastric ulcer for a long time, is taking the prescription with me and is nearly well.—Dr. F. M. K.

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From Kansas, we find the following: I had the acid mineral solution made up. I have been giving it to stomach and gall stone cases, or rather gall bladder cases. Does it help these cases! The last was a case of blood poisoning. Fever at  $104^{\circ}$ . Two other cases died. My case has made a good recovery.—H. M. B.

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The following letter from Wm. H. Ross, M. D., Houston, Texas, who has kindly permitted me to use his name, is most encouraging. He writes as follows:

You have asked me to say a few words on the subject of treatment with your formula of HCl and potassium salts. I had rather write the book and leave to you the task of relating a grand experience in a few well chosen words.

Your articles on this epoch making therapy first came to my notice about a year ago. The idea of injecting HCl into the veins of a living patient seemed then so radical and devoid of hope that I became almost morbidly curious to see how far astray enthusiasm could lead a sane man. I read several of your articles at one sitting and vaguely decided to try it some day.

After a few days the opportunity came. How vividly I recall my mental reactions on that occasion! I was called to relieve a bed ridden man of 88 years, suffering intensely from cardiac asthma, weak and weary from lack of sleep and cough. I decided to give him 8 drops of the solution very slowly into the vein. I remember watching anxiously for signs of air-hunger and for the iris to disappear upward. Neither occurred, but he passed into a fairly comfortable sleep instead, within 30 minutes. He then received the same dose daily for

three days with 15 drops orally t. i. d. and lived in moderate comfort for several weeks.

The next case was a woman of 40 years, seen for the first time. I found her propped up in bed gasping for breath, a heart case of years' standing. Her hair and body soppy with a cold perspiration, cyanotic, anasarca, moderate oedema of feet and legs; lungs congested, bad cough; anything swallowed caused vomiting; pulseless at the wrist; heart very feeble and intermittent. Death seemed imminent. The question came, what can I do? Relief was urgent. Morphine would have been fatal, while water or drugs were promptly vomited. Fortunately I had some acid mineral salts with me and lost no time in giving her 10 drops intravenously. The urgent symptoms gradually abated and she rested fairly well during the rest of night. I then gave eight drops intravenously daily for a week and twelve drops orally t. i. d. Thereafter for many weeks she received bi-weekly injections and ten drops orally t. i. d. She is today in better health than she has had for years and cares for the home with help.

This is one of the most remarkable cases that I have ever known, because I have never before seen such a case recover.

Becoming bold I moved on to an old gastric ulcer case diagnosed by X-ray; a woman of 35 years, suffering and weary of life. My fame was beginning to travel abroad. How success builds self-confidence! She said pathetically, "Doctor, I am so tired of pain and being sick. Can you help me?" My mind spoke more eloquently than my words for I merely looked straight into her eye and said, "Yes" with a smile. That woman is living today in comfort and eating everything fit to eat.

The medicinal treatment was the same as in the heart case except that I gave fifteen drops orally in a full glass of hot water to be sipped after eating—or drinking rather, for the diet consisted in orange juice diluted, and milk and cream alternately, no alkalis.

More recently, a unilateral case of buboes of six weeks' duration following a small non-specific sore on prepuce. Young man could not accept position with a large manufacturing concern on account of rigid examination requirements. Glands were large and hard, would neither resolve nor suppurate un-

der treatment of another doctor. Same treatment as outlined previously with result that the glands returned to almost normal in fifteen days and the patient passed his examination and went to work.

I will conclude with a severe sub-acute laryngitis of about four weeks' duration and no sign of improvement. Soreness and aphonia in early morning merging into an underworld guttural as the day wore on. Had had vaccine, tonics, gargles and purgatives by another doctor. In addition to acid mineral solution intravenously and orally I prescribed the same solution to be used undiluted as a gargle (but patient did not know it). It makes an admirable gargle. Except for vocal tiredness, the laryngitis was completely cleared up in ten days.

I could extend this greatly and include the striking results obtained in pneumonia, pul. tuberculosis, "athlete's foot" by local application, a spastic paralysis following hemiplegia a year ago restored to almost normal, not to mention the rheumatic and gouty tophi that are slowly but surely being absorbed. To those who may doubt these assertions I can only say, "Unburden your minds and try it."

I suspect that the greatest obstacles to the acceptance of HCl and potassium salts will be found in its extreme simplicity, inexpensiveness and great variety of uses. But the latter is more apparent than real when the identity of the underlying cause of many diseases is given due consideration.

The two outstanding results of my use of HCl and potassium salts are these: I am now curing, or greatly relieving, classes of patients that formerly died or drifted away from me; and patients now remit cheerfully and with a smile instead of begrudgingly or not at all.

A suffering public is anxiously and patiently awaiting a brand new deal in medical diagnosis and therapy.—Wm. H. Ross, M. D., Houston, Texas.

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Case 1. Miss R. came to me last October with a lab. report showing a 4 plus; I immediately gave her a 0.9 shot of Abbotts Neosalvarsan and 1 Pil Mix Treatment (Upjohns) after meals; after 10 days gave her 10 cc. Dr. Guy's mixture every 10 days since that time, however missing a few days at

time account away from office. The young lady, being a beauty operator, had to have a Wasserman before being granted a permit to operate her shop under the new law. I was very much surprised when on the 1st of this month she appeared at my office with a negative Wasserman; did the HCl Mix do the work!

Case 2. Mr. S. had gonorrhea when 16 years of age, and has had a very copious discharge at times ever since; married and now 41 years of age; gave 10 cc. Dr. Guy's mixture every 5 days until 20 doses given. Prostate was in bad condition and urine had to be drawn at times; washed bladder with one-half ounce every other day with Sp Tr Thuja 1 drachm, 2% mercurochrome q.s. 6 ounces. Patient passed about couple tablespoonfuls of something that looked like venereal warts after a few irrigations and his discharge stopped entirely and prostate is normal; he has had no trouble during a couple months and no further treatment.

Have been having good success with asthma and hay fever and have used nothing but the Guy-Ferguson methods of HCl; am treating a lady who came from Washington, D. C., had high blood pressure and her left eye was practically blind and her right not much better. Have given her 8 shots of the mixed acid 10 cc. each, and her vision in both eyes has begun clearing and she can see much better; have great hopes she will entirely recover her sight; will report later on case.—C. W. B., M. D., Texas.

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I have been using the acids extensively for the past forty-five years, especially HCl Dil.

In atonic dyspepsia it is very effective. In so called rheumatism it is a reliable remedy; also in skin affections with liver spots.

In urticaria it is our most effective remedy. I give liq. pot. arsenites T. I. D. with a dose of HCl in the middle of the forenoon and afternoon. Sometimes a substitution of the tinct. of the chlor. of iron will do the trick.

Acid clears the system of fungus growths, stimulates the liver to an increase of secretions. All the other glands take on a more active movement and the secretions are more liquid



and not so sticky and move more freely through the lymph channels.

Thus it aids in clearing the system of poisons, lets old ulcers heal, clears out old bladders, eases up old prostates and kidneys.

It liquifies sticky lung and throat secretions, makes uninhabitable the roosting places for all sorts of germs and favors the return of normal temperature in low fevers.

Eccinacae, thuja, iris, arsenic, iodide of potassium and even mercury given at the same treatment, but at different hours, are frequently effective whenever those remedies are indicated as scavengers or system cleaners.

I haven't been using acids mixed with other medicines. I know of no reason why it should not be done, if the formation of deleterious chemical is avoided.

One who has wrestled with a case of chronic hives, and hasn't used HCl and Fowler's sol. has a pleasant surprise coming and a laugh on himself.—W. R. W., M. D., Texas.

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I have just started to use Dr. Guy's formula and so far have had splendid results, especially in a case of suspected bronze diabetes, or hemochromatosis. Patient a colored woman, age 38, B. P. 140/95, face, arms, and legs showing a dark pigment.

Legs showed numerous nodules of erythema, some broken down and very painful. She complained of being very weak with no appetite, inability to sleep. Claimed she did not drink much water now but had to get up 5 or 6 times at night to urinate. I found a small amount of sugar in the urine each day but on examination of blood only a normal amount, 102 mil. per 100 cc. I ruled out Addison's disease because of the B. P. and the finding of sugar in the urine.

Patient states that following the first injection, she had to get up only once during the night and after the 3d, did not have to get up at all and also states that a heavy, greenish, yellow discharge from uterus, cleared up entirely after 18 intra-



venous and intramuscular injections of the mineral acid solution.—H. C. L., M. D., Washington, D. C.

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There is hardly a day but what I use hydrochloric acid in some form, usually intravenously, and occasionally in combination with the mineral chlorides. It seems to me that it is a specific in most any form of sore throat. I have never had or never have used it in diphtheria, and of course would not except in combination with antitoxin, depending of course on the antitoxin, but I have used it on several cases of scarlet fever with uniform good results. It seems to me that in scarlet fever it will give as good results as the Dick antitoxin, when that is administered at the proper time. Any one that has used the Dick antitoxin at the proper time and noted its startling good effect, will be much pleased to know that you do not have to pick your time in using the acid as you do the antitoxin. You may have to use three or four doses of the acid, but I have yet to see it fail and have had no albumen appear in the urine, when using it, as so often is the case in the usual run of scarlet fever cases.

The recent epidemic of septic sore throat through the country was as prevalent here as elsewhere and the acid gave me excellent results in nearly every instance. I recently had a four months' old baby, with what I considered a broncho-pneumonia as well as I could tell from examining a yelling, squirming infant. On going back the next day I found it in a cyanotic condition with labored breathing and with a look as though it was about to pass out. I immediately gave it 4 cc. of a 1/1000 hydrochloric acid intramuscularly and in less than ten minutes the cyanosis cleared up. I then put it on the acid mineral mixture every four hours and continued to use the intramuscular injection for the next few days without any improvement in the cough however; the temperature readily dropped to normal or near normal, but the cough continued almost continuously. I finally controlled it with intramuscular injections of ether as in whooping cough and it responded very nicely continuing to recovery.

I have recently treated two cases of acute gonorrhea with the acid intravenously with good results, both patients im-

proving readily one recovering in about four or five weeks. I used gentle prostatic massage, as well as having the patient use a one per cent. of Protargol three times a day locally and a copaiba compound orally. I used the acid in one to two hundred and fifty in these cases, ten cc. every day.

I have used it in several cases of pyelitis, cystitis and prostatitis with uniform good results. Have used it in several cases of acne with good results in the majority of cases, three-fourths clearing up nicely. Ferunculosis clears up readily. Asthma is readily relieved.

It is practically a specific in urticaria, some patients saying they feel relief even before you are through injecting the solution.

I have treated a few cases of salpingitis with good results seemingly effecting a cure, am treating one now that has also a long standing peptic ulcer who just recently suffered a severe hemorrhage. I am using the acid twice a week for the salpingitis and the sodium salicylate four or five times a day orally for the ulcer and am getting results. That was taken from advice given by Dr. Louis W. Schwindt of Philadelphia, in the March, 1934, *World*.

I have an old lady seventy-eight, who has had a myocarditis for several years. About three years ago she had symptoms from which a colleague and myself diagnosed cancer of the stomach. Tenderness and a lump in the region of upper left quadrant as well as coffee ground vomit. I put her on colloidal gold in ascending doses with very much benefit, so much so she looked like a new woman in no time. Later she contracted a cold and came down with a severe bronchitis. I used the HCl 1/1500 every day for a week and she recovered. This patient's vein became occluded and very tender at the site of injection. She seemed to not do so well under the gold after recovering from the bronchitis, so I put her on the acid mineral mixture with happy results and have kept her on it intermittently ever since over a year and although she has had a left hemiplegia for over six months is otherwise comfortable. A bradycardia of years' standing has improved to the point where the pulse rate is between sixty and seventy, as where before it was between forty and forty-five. With the exception of the attack of dyspnea occasionally, she is doing very

well. We all agreed that she would die more than two years ago. I believe the acid mixture has kept her alive.

I treated a married woman for a colitis of four years' standing with 1/500 every day for a week. From the very first dose she was made easier and continued to improve to the point where she failed to return, and meeting her on the street some time afterwards she said that all of her symptoms had disappeared and was comfortable for the first time in years. I usually put all of my cases on the acid mineral mixture by mouth and have them continue for some time.

Recently treated a case of tonsilitis, that was complicated with severe case of cystitis; it was another physician's case, and as he happened to be out on a confinement, the parents asked me to see her. I gave her the acid intravenously, and was told next day that she had the first comfortable sleep in a week. I was told by some good friend later that when the other physician saw her the next day and was told what I had given her, remarked, "Him and his needle." I have given it in a few cases of appendicitis, but being mindful of Dr. Ferguson's warning to watch out in such cases, as an abscess is likely to form and a speedy operation may have to be done, which happened in one case. ✓

Have recently treated a nine year old youngster who has had a condition that has been diagnosed by others as a chronic bronchitis, cough coming on suddenly usually at night and would cough incessantly. Had been treated by violet ray with improvement, but only temporarily, and the usual run of drugs had been used with only temporary improvement.

As well as I could make out it seemed to me he was suffering from more asthma or hay fever, had slight rise in temperature, accelerated pulse with respiratory rate around thirty and somewhat labored, very nervous and unable to sleep with any degree of comfort. These attacks have been recurring for the past four years with increasing severity lasting indeterminately.

I was unable to use the acid intravenously and had to give it intramuscularly and only gave two doses as he was so excitable. I put him on the acid mineral chlorides orally and had them use my infra red lamp back and front for half an hour every day for a week or ten days with marked improve-

ment from the very first. After stopping the use of the lamp I put him on Haliver oil in conjunction with the Guy's mixture No. 2, and the report is that he is doing very well—in fact better than for a long time.

I have used the acid mineral mixture in babies with enteritis, age anywhere from a month or two up, and get results. I have used it in two cases of earache in children three years old, where all other remedies failed to relieve the pain and was thinking of doing a paracentesis but got by with the acid.

I know full well that what I have written is a long way from being a scientific report of what I have accomplished with the use of the acid and acid mineral chlorides, but am well satisfied to know that I can treat a lot of conditions that used to be nightmares to go up against in the past, with confidence to myself and satisfaction to the patient.—P. L. G., M. D., Maryland.

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I have employed dilute HCl with the mineral salts in several cases with apparent success.

Case 1. Male, 42, came to my office Oct., 1934. Severe gastric pain after food ingestion. Gave him lactated pepsin with HCl p.c. and he seemed to improve; while taking the medicine he had no pain, but when out of it his pain returned. I diagnosed case as gastric ulcers. Ordered him to the hospital for X-ray, and as he was a relief case was kept there for three months—then sent home as a severe case of cancer of stomach and bowels so the relief man informed me.

Case was inoperable. In the meantime, I'd read your articles in *The Medical World*, ordered the little book and decided to try the acid mineral treatment intravenously and orally. He improved after the first intravenous treatment. At first daily, then semiweekly. The pain in stomach left entirely after five treatments and only remained in lower bowel, but this strangely appeared only in afternoon. But he gained in weight and strength. I treated him from Feb. 21, 1935 to Apr. 12, when he was taken to the State General Hospital, where he remained till May 29th when he returned home.

The State General Hospital report was to the effect that



he had no ulcers either gastric or intestinal; the report was an exhaustive one and the patient received no treatment at all beyond an oil for the bowels.

When the report reached the County Doctor who sent him, he could not believe his eyes. What happened to the ulcers and supposed carcinomas that were there to a certainty! I came to the conclusion my treatment must have been responsible. Since June 4 I gave him weekly treatments and he tells me he is getting well.

Case 2. Removal of a carcinoma of lower eye lid. The growth measured one and one-half by two and one-half inches. Administered the acid mineral salts intravenously, the wound healed beautifully; no recurrence or sign of recurrence thus far.—J. W. E., M. D., Wis.

Mrs. S. S., age 63, came to me March 3, '34. First saw her sitting in a rocking chair, no use of hands or feet, unable to help herself at all; been this way three years. Had treatments at Mercer and Presbyterian and West Penn Hospitals, Pittsburgh, Temple at Philadelphia and six weeks of observation at Johns Hopkins, Baltimore. Could not pin syphilis on to their diagnosis. They called it a progressive necrosis of the nerves. She returned to her home with the news that they could do nothing for her. After listening to her story, I said: "Let us try what something new will do, something that these other fellows have not studied about." Results of six weeks of internal, both intravenous and oral HCl mineral compound, she moved about and in two months she took charge of the outside shopping and buying for the family. In three months she took full charge of the house in all its details. A splendid recovery.

Mrs. E. S., age 35, ovarian cyst as large as a man's hat. Both forms of taking the remedy were used,  $\frac{1}{1500}$  and 10 gtts. to each 10 cc. and in six weeks there was no tumor or unpleasant symptoms. Considered herself well.

Mr. J. S., age 64, degeneration of the anterior horns of spinal column; staggering gait, dragging his feet, droll speech, had to be assisted to enable him to move his feet or to stand up. No sensation in any part of hands and arms; a physical and nervous wreck, all from a fall and infected wounds. He



is making remarkable improvement and continues to improve each week. All through the use of HCl mineral compound.

Mrs. M. W., age 87, epithelioma of side of nose near bridge, caused by tight squeezing of nose-glasses. Wonderful improvement in two months of both the oral and intravenous use of this, shall we say panacea. Still is improving at this writing.—S. E. E., M. D., Penn.

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Received letter in April asking about Brooks Morris, the man with blastomycosis; put off answering until now to be sure that patient didn't slip. Saw him yesterday, he is *fine*. Was called to see this patient in July, 1934. Found him a mass of sores from head to foot. Stuck on morphine for about two months; only three places could touch the bed: back of head, hip and heels; barrel hoop over him for protection; very badly emaciated; probably, weight 110 lbs; about six feet tall.

This man was born and reared on farm and last few years worked at barber's trade. Never had any sickness until October, 1931, when he had to leave shop. Too weak to do the work. In November, 1931, began to have hemorrhage of lungs, put to bed for 16 months; treated for T. B.; was up for two months, then back to bed. Some time in 1933 began to have skin eruption, boils, etc. Was taken to Lexington, Ky., to skin specialist and his diagnosis was blastomycosis and usual treatment prescribed: Iodides, etc.; finally passed on to morphine and consigned to grave. He was in above condition when I saw him. I prepared for him 14 ounces of mineral oil and 12 moth balls cooked together "according to Dr. W. B. Guy formula" and applied locally. Gave him 1 gr. naphthaline internally 3 times a day for 2 weeks, waited 2 weeks and gave again.

Improvement began in less than a week and continued until he is now well, about 180 lbs., good appetite, sleeps well, up and about. Has not taken any morphine since July, 1934. Not a sore on him but plenty of scars.—E. A. C., M. D., Ky.

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Have been out of City over at Ranch in New Mexico and have had very little time to do much practice of medicine;

however while over there a Mexican girl of about 10 was bitten by a rattler an hour before I reached the ranch house and her little hand was quite badly swollen; I gave her 5 cc. 1/500 HCl and applied a compress of snake mixture, I always carry, made of 1 drachm of bi-chloride, 1 drachm of camphor gum in 6 ounces of coal oil; I went on fishing returning about 2 hours later and found the little girl resting easy and swelling almost gone; next morning she was O. K.

Am treating 3 cases prostatic and all are doing fine, giving 10 cc. 1/500 HCl every 5th day with 15 drops of the acid mineral salts after each meal; all dribbling of urine has stopped and lost the ammoniacal odor and only one passes urine after retiring and then not over twice during the night and hope that will soon stop.

Have treated quite a few cases of different things with the Guy mineral addition to the HCl and find I get results in about 90% of cases; had a young lady with bi-lateral pneumonia last month, gave her 1 shot daily of the acid mineral solution for 4 days and on the 7th day she left with her sister and drove to Wellington, Texas, feeling fine; soon as get time will give you what little experience I have had with the HCl combination, but the best money I ever spent was the \$2.00 I paid for Guy's book; it's worth its weight in gold to any physician.—C. W. B., M. D., Texas.

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To start with, have never used a better and grander preparation. It gives more satisfaction and produces more good results in more ways and in more diseases than any remedy I've ever used. To enumerate, a case of spider bite with pale swelling, fever and infiltration. One dose intravenously controlled the surrounding swelling. With asthma (bronchial), never saw its equal. Opens the cells of the lungs and will finally eliminate the cause. Unloads the lungs of excess sticky phlegm. Tones up and invigorates the entire system, and in blood dyscrasias it cannot be excelled intravenously and intramuscularly. (I use more care when given intramuscularly or gluteally.) In gonorrheal troubles it requires but a few daily treatments intravenously. But just a few days' treatment either dries them up or scatters or matures them in short or

der, and best of all one of the most spectacular cures and most satisfactory cases I've ever had was a neoplastic ulcer behind ear on the writer of three years' standing, and doing my best all the while to cure, but to no avail till I used the above, and then veni, vidi, vici—just 5 or 6 intravenous treatments and local of benzoic and boric powder. It deserves my lasting gratitude, I must say. Malarial cases give way quicker than from any remedy I've ever used. Seems to kill the germs, reconstruct, invigorate. A snake bite case (copperhead), I'd call it a "sure thing." From the first intravenous treatment a little girl 7 years of age bitten four times prior to coming to office at night. The pain and swelling and poison were all antagonized and one more dose next day. Dismissed and doing extra fine.—E. M. F., M. D., Texas.

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Case of diabetes mellitus of several months' standing, who was very much emaciated, sleepless at night, quite weak, and was taking 20 units of insulin three times a day in an attempt to control urinary sugar, blood sugar varying from 45 to 60.

After establishing a rigid diet and with frequent urine checking I found his carbohydrate tolerance. I then supplied a diet with sufficient fats as butter, cream and bacon, with fresh and cooked vegetables and some fresh fruits, to furnish sufficient calories for one of his weight.

In addition to the foregoing I gave the patient 18 drops of Dr. Guy's formula No. 1 in a little water after each meal and at bedtime, with none intravenously.

In two weeks' time there was a very noticeable improvement in his general well-being. He slept better, felt better and looked better. As the weeks came and went the blood count gradually increased till at this date now six months from the start of treatment the patient appears perfectly healthy, ruddy complexion, sleeps well nights, rested and peppy in the morning, enjoys life and increased several pounds in weight, and all this without any insulin.

Most assuredly the diet had something to do with his improvement, but I attribute it very largely to the dilute hydrochloric acid and the acid mineral salts, which he took very

faithfully because as he says, "It is a relief to get away from that insulin needle."—R. B., M. D., Mich.

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I am now treating three outstanding cases and all are rapidly recovering; they are going to get well, I am sure.

1. Breast, double amputation of, and removal of uterus for cancer during the past twelve years. Came to me with the assurance of several surgeons that there was nothing left for her to do, other than to take morphine the rest of her life. The right arm had been swollen and very painful for the past four months. After one week's time and two intravenous injections of your solution, and ten drops orally t. i. d., she has omitted her pain medicine; the upper arm has decreased three-quarters of an inch in diameter and her forearm one-half of an inch.

2. Traumatic infection encephalitis, or multiple sclerosis of three years' standing. This patient, 24 years of age, had been declared permanently and totally disabled by the State Industrial Board, and offered \$2,250 for complete settlement. I have treated him less than two months, with the acid mineral solution, both intravenously and by mouth, with the results that he will soon be able to go to work.

3. Osteomyelitis, 22 years' standing; operated on 5 times. Now after 3 months' treatment the sinus is beginning to close, and the discharge is subsiding, and patient is gaining in weight.—J. M. M., M. D., Washington.

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You surely have done a world of good to suffering humanity, with the solutions of acid HCl. I think it is the great treatment for tuberculosis. I have had some marvelous results.—W. F., M. D., Pa.

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I have used the hydrochloric acid treatment almost from the time Dr. Burr Ferguson first announced its use, and have used your old formula during the past three years. I like the effects of these drugs very much, and have gotten some very



decided and, in some cases, wonderful results—A. H. T., M. D., Mo.

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I have been prescribing “moth balls” since reading your article in *Medical World*. I have given them boiled up in mineral oil internally a little chloroform added, for cases of bronchitis and also nephritis in children with very happy results. I consider naphthaline both externally and internally one of our most valuable drugs and all thanks for your suggestion.—J. W. B., M. D., Mo.

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Dr. A. B., age 76, has been sensitive to egg yolk for fifteen years. The slightest amount of egg yolk would produce, within 72 hours, a number of blisters in the palms of both hands. If the amount of egg yolk was larger these blisters would appear on the dorsum of the hands and also upon the face. Dr. B. had a slight attack of influenza just before Christmas, 1934. This was followed by some weakness generally. But, the sensitiveness to egg yolk was still present. The acid mineral solution according to the formula of Dr. Guy was recommended. Fifteen drops in water was taken after each of three meals per day. This treatment was continued for three months and was the only treatment given.

Accidentally some egg yolk was given in a prepared egg salad dressing. We expected the usual blisters on the hands, but they did not occur. To make a test, I gave him one-eighth of the yolk of a hard boiled egg. Still no occurrence of blisters. The amount of egg yolk was increased to one-half yolk. We allowed 72 hours to elapse after each test but the blisters did not occur. Since that time, I am pleased to report that the doctor is ingesting one egg, at least, every day. He is having a grand time now because he was forced, for so long, to absolutely refrain from any food or dish that contained egg yolk—D. C. R., M. D., Cal.

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My experience with HCl is rather limited but I have gotten some wonderful results in tonsil abscesses and other puru-



lent conditions. The most striking experience I have had was in a case of child bed fever, was called to see a woman in consultation who had been delivered six days before and found her with a temperature of 107. She had been "sick" five days, the attending doctor told me that this fever had been running at this rate for the past three days. I suggested that we give her HCl intravenously daily, the fever began to subside immediately and in one week she was entirely well.—G. L. J., M. D., Okla.

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I have used the HCl therapy on only a few cases and will report one of them for the present. This was a case of idiopathic epididymitis. The onset of the disease was with severe chills, high fever and general malaise. When first seen by me the patient complained of headache and nausea and his temperature was 103. Examination disclosed a small nodule in right epididymis which was extremely tender to touch. Patient complained of a dragging pain in the right hypogastrium when he stood erect with the testicle unsupported. My treatment at first visit was expectant with elevation of the testicle and hot fomentations. After 24 hours there was no improvement and as I had brought an ampoule of 1/1500 HCl with me I administered it intravenously; 24 hours later the symptoms had all very markedly abated and I gave another ampoule of the acid. At my next visit the following day all symptoms had disappeared as well as the nodule in the epididymis. This seemed to me to be a very remarkable result in condition which is hard to treat successfully.—F. L. W., M. D., Wash.

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I am one of the men who has used HCl almost from the time it began to be advocated by the *Medical World*. I would like to mention two cases in which the results were unusual.

Miss G., Pueblo, Colo., age 19. 4-2-35. Young and in general good health. Complained of seasonal hay fever of six years' duration, beginning sometimes the latter part of April and continuing to about the middle of September. Symptoms at no other time of year. Unable to work. Before test-

ing and desensitizing her I placed her on HCl. Ten drops of the dilute acid t. i. d. To my surprise the allergy disappeared. She has had no trouble in holding her position.

Mr. J. P., Pueblo, Colorado, age 33. Works in brewery. This was a case upon whom, about two years ago I performed a Hagner's operation on the epididymis. He had relief for about 18 months. Complained of pain in back, which interfered with his work in the brewery. Could not relieve with various other sedatives, finally, in desperation, I put him on HCl. Fifteen drops t. i. d. and to my amazement his backache almost disappeared. He still has some ache in his back at times, but the relief given by the HCl was very marked. Am using short wave on this man now.

I believe Dr. Guy's discovery of the use of HCl a great boom to me as it is easily obtained and costs very little. I shall continue to use this acid in my practice.—W. E. M., M. D., Colorado.

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For some time I have been interested in the use of hydrochloric acid as advocated by Dr. Burr Ferguson, of Birmingham, Alabama, and its combinations as advocated by Dr. W. B. Guy, of St. Augustine, Florida, and wish to report the following case: First seen, June 13th, 1935, a white man, age 24, married. Textile worker. Family history: A brother died three years ago with acute carditis, and some unknown infection, his mother says his symptoms and suffering very similar to this case. Personal history: Healthy, no history of tuberculosis or syphilis. Had malaria six years ago, duration 3 or 4 weeks. When I first saw him he said he had chills all night before and his temperature 104, pulse 120. Profuse perspiration, pains all over body, and especially in his head and back. Had a rhinitis but no discharge. Lungs seemed very badly congested but no rales found. June 14th, marked delirium, recognized no one, had a chill the night before. Temperature 104.2, respiration 35, pulse 130. Neck and back very rigid, could not turn head without turning body. I made a diagnosis of cerebrospinal meningitis concurred in by two other physicians. There was no blood count, nor lumbar puncture made. Urine showed albumin, no casts. On

3rd or 4th day herpes appeared on his lips and some petecheal eruption on hands. No eruption found on body. Treatment begun: On second day was 10 cc. of 1/1000 solution hydrochloric acid intravenously every 12 hours, bowels kept open, gave morphine one-quarter gr. Prn to make him sleep. From second day of treatment temperature fell from one-half to one degree daily. On eighth day he regained consciousness and was able to tell how he felt.

After the tenth day I only gave one dose of 10 cc. 1/1000 per day. On the 14th day temperature having been normal for three days, the treatment was discontinued and he is "O. K." My idea in giving this treatment was to raise the white cell count, thereby increasing phagocytosis, enabling him to better combat the disease or infection.—C. B. H., M. D., S. C.

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I have been very much interested in HCl therapy with myself as the patient. I have suffered from achylia for eight years, weight going down from 175 pounds to 125. Have been taking Dr. Guy's acid mineral compound for about four months. My appetite has improved and my food does not distress me but I do not gain weight. However, I am active and as efficient as ever if my animal efficiency counts for anything I have 120 insane boys under my care. I am getting up in years and am very thin; would like to weigh about 25 pounds more than I do. But as long as I have a good appetite and can keep going I should be satisfied. I shall continue to take the acid mineral compound as there is no doubt in my mind that it has done me a great deal of good.—V. G. I., M. D., Georgia.

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Case of Mrs. M. L. P., 67 years, Mass. Had right breast removed 7 years before, left eye 2 years ago for cancerous growths. First examined August, 1935. Loss of weight, 57 pounds. Two sarcomas on left shoulder each 2 by 3 inches—six small ones on body; weak and toxemic. Has eaten about 5 eggs daily for most of her life. Was given benzoic solution, 15 drops diluted, 4 times daily.

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Pain in arm has disappeared, also smallest growth. Great improvement in vitality and strength. Tumors on shoulder showing signs of absorption. Latest report is that she is improving and keeping house, etc., for seven people. This case that was quite hopeless, now seems to indicate recovery is possible.

✓ Case of R. V. V., male, age 42 years, Mass. Three years previous, severe pains in back and shoulder. For two years cough and sputum, very nervous, sleep much disturbed; an enlarged gland on shoulder removed at Massachusetts General Hospital. ✓ Diagnosis: Hodgkins disease. X-ray therapy administered with partial relief. On July 4, 1935, was given the acid mineral solution. August 4th, expectoration more profuse and quite offensive, and benzoic solution 15 drops diluted 4 times daily. August 25th, much improved, expectoration stopped, sleep normal, better in every way. September 4, 1935, still improving, and feels quite normal. Glands in postmediastinum becoming smaller and pain in 8th cervical vertebra that X-ray films showed involved has disappeared, also two small skin cancers on face which were curetted off, are now healed. Still under treatment.

## CONCLUSION

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This book must be brought to a close; but the work outlined in its pages is only beginning. The book tells of the author's personal struggles, concepts and conclusions. The path he has travelled in study and clinical experience with the use of hydrochloric acid and mineral salts, by which he has sought a truer explanation of hidden mysteries of life and death, health and disease, has given him moments of gratitude and exaltation, experienced only by those who have travelled this journey of search for the never-attainable goal of Truth. At times, when the hopeless and despairing have been made whole, it has seemed that a corner of the veil which covers the face of Truth had been lifted—that a trace of the fragrance from her perfumed tresses had been inhaled; this intoxicated the writer and thrilled him to further endeavor and search.

To those of the medical fraternity who are struggling along this same path, a few of whose reports are included in this same volume, the book is dedicated. The author wishes to appeal to those whose feet have not as yet entered upon this therapeutic road. In this book are found our thoughts and the reasons for them, as well as brief accounts of some selected cases. Others are urged to test this therapy for themselves. Leave for a while the endless and unsatisfactory empirical therapeutic path and seek instead, to understand nature; learn her laws, and in humble obedience to these laws, attain the victory over inevitable death, even if it be but for a short season.

The benzoic acid therapy for malignant neoplasms is new in the writer's experience. Years must pass, countless tests must yet be made before it may be considered truly specific. The manner of its administration, its dosage, its adjuvants and compounds, can only be determined by many hands and cases. Here are the author's results in hopeless cases. As this book goes to the printer, the latest reports received are to the effect that the acid benzoic solution is winning victories for hopeless and despairing people. No report has come in



of digestive disturbances. Whether the diagnosis may be disputed, it matters not. At present no reliable specific internal treatment is available. It must be left for those whose hearts are unprejudiced, to test this therapy carefully and earnestly, for the final judgment of all curative procedures must be rendered by the general practitioners. Humanity suffers, why delay! What the writer has done, others can do. Go forward!













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